ON PLANTING AND RURAL ORNAMENT.

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ON PLANTING AND RURAL ORNAMENT.

A PRACTICAL TREATISE,

BY MR. MARSHALL.

THE THIRD EDITION.

IN TWO VOLUMES.

VOL. I.

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ADVERTISEMENT.

THE Intention of this Publication is to bring into one point of view, and arrange in a compendious form, the Art of Planting and Laying-out plantations: an art which, though in itself a unity, has hitherto been treated of as two distinct subjects. Books on Planting we have many; and those on Ornamental Gardening are not less numerous; but a Practical Treatise, comprehending the entire subject of conducting Rural improvements, upon the principles of modern taste, has not hitherto appeared in public. This circumstance, however, is the less extraordinary, as the man of business and the man of taste are rarely united in the same person. There are many Nurserymen who are intimately acquainted with the various methods of propagating trees and shrubs; and many

Gentlemen whose natural taste, reading, and observation enable them to form just ideas of rural embellishment; but where shall we find the Nurseryman who is capable of striking out the great design, or the Gentleman equal to the management of every tree and shrub he may wish to assemble in his collection? To proceed one step farther, where is the Gentleman, or the Nurseryman, who is sufficiently conversant in the training of Woodlands, Hedges, and the more useful Plantations? In fine, where shall we look for the man who in the same person unites the Nurseryman, the Woodman, the Ornamentalist, and the Author? We know no such man: the reader, therefore, must not be disappointed when he finds, that, in treating of exotic trees and shrubs, the works of preceding writers have been made use of.

COOK is our first writer on Planting; nevertheless EVELYN has been styled the Father of Planting in England. It is probable that, in the early part of life, EVELYN was a practical planter, upon his estate at Wotton in Surrey; but his book was written in the

wane of life, at Greenwich, during a long and painful fit of the gout. His *Sylva* contains many practical rules, valuable, no doubt, in his day, but now superseded by modern practice; and may be said to lie buried in a farrago of traditional tales, and learned digressions, suited to the age he lived in*. MILLER at length arose among a group of minor Planters; and after him the indefatigable HANBURY, whose immense labours are in a manner lost to the Public.

COOK and EVELYN treated professedly of FOREST TREES, MILLER and HANBURY include ORNAMENTALS; but their works, which are voluminous and expensive, also include kitchen gardening, flower gardening, the management of greenhouses, stoves, &c. &c. the propagation of trees and shrubs, adapted to the open air of this climate, forming only a small portion of their respective publications.

MILLER and HANBURY, however, are the only writers who could afford us the required

* The first Edition was printed in 1664.

assistance; and we were led to a choice of the latter, as our chief authority, by three principal motives:—HANBURY wrote since MILLER, and, having made ample use of Mr. M.'s book, his work contains, in effect, the experience of both writers: MILLER is in the hands of most Gentlemen; HANBURY is known to few; his book, either through a want of method, a want of language, or through an ill judged plan of publishing on his own account, has never *sold*: and lastly, MILLER's botanical arrangement is become obsolete; HANBURY's is agreeable to the Linnean system.

SINCE MR. HANBURY's death, the Public have been favored with a new and sumptuous edition of EVELYN's *Sylva*; with notes by Dr. HUNTER of York, consisting of botanical descriptions, and the modern propagation of such trees as EVELYN has treated of. These notes, however, contain little new information; the descriptions being principally copied from MILLER, and the practical directions from HANBURY.

LEST unacknowledged assistance, or assistance acknowledged indirectly, should be laid to our charge, it is thought proper to particularize, in this place, the several parts of this publication, which are *written*, from those which are *copied*.

THE INTRODUCTORY DISCOURSES, containing the MANUAL OPERATIONS, of Planting, and the OUTLINE of the LINNEAN SYSTEM, are, as rudiments, entirely new; excepting the quotations from Linneus's work, which quotations are extracted from the Lichfield Translation of The *Systema Vegetabilium* of that great man.

THE ALPHABET OF PLANTS, so far as it relates to TIMBER TREES, and other Native PLANTS, as well as to some of the more USEFUL EXOTICS, is either wholly our own, or contains such additions, as have resulted from our own observation and experience: so far as it relates to ORNAMENTAL EXOTICS, it is entirely HANBURY'S; excepting the quotations which are marked, and excepting the GENERAL ARRANGEMENT, which is

entirely new. HANBURY has not less than six distinct classes for the plants here treated of, namely, deciduous Forest Trees, Aquatics, evergreen Forest Trees, deciduous Trees proper for ornament and shade, evergreen Trees proper for ornament and shade, and hardy climbing Plants. The first three classes are without any subordinate arrangement; in the last three the plants are arranged alphabetically, agreeable to their genera. This want of simplicity in the arrangement renders the work extremely heavy, and irksome to refer to; and is productive of much unnecessary repetition, or of tiresome references, from one part of his unwieldy work to another. His botanical synonyms we have wholly thrown aside, as being burthensome, yet uninstructive; and in their place, we have annexed to each Species the trivial or specific name of LINNEUS; which, in one word, identifies the plant, with a greater degree of certainty, than a volume of Synonyma. Other retrenchments, and a multiplicity of corrections, have taken place: however, where practical knowledge appears to arise incidentally out of our author's

own experience, we have cautiously given it in his own words: likewise, where interesting information lies entangled in a singularity of manner, from which it could not well be extricated, we have marked the passages containing it, as literal quotations;—to distinguish them from others, which, having been written in a manner more properly didactic, or brought to that form by retrenchment or correction, we consider as being more fully intitled to the places we have assigned them.

THE articles TIMBER, HEDGEROWS, and WOODLANDS, are altogether new*, being drawn from a considerable share of experience, and an extended observation.

THE Sections on RURAL ORNAMENT, are likewise new, if anything new can be offered on a subject, upon which so much has been already written. Taste, however, is a subject upon which all men will think and write differently, even though their sources of infor-

* Excepting such extracts and quotations as are marked and have their respective authorities subjoined.

mation may have been the same. WHEATLEY, MASON, and NATURE, with some EXPERIENCE, and much OBSERVATION, are the principal sources from which this part of our work was drawn: if we add that it was planned, and in part written, among the magnificent scenes of nature, in Monmouthshire, Herefordshire, and Gloucestershire, where the rich and the romantic are happily blended, in a manner unparalleled in any other part of the Island, we flatter ourselves no one will be dissatisfied with the *origin*: of the *production*, let the Publick speak.

ADVERTISEMENT

TO THE

SECOND EDITION.

To this SECOND IMPRESSION, we have been enabled to make considerable ADDITIONS; particularly to the Subject RURAL ORNAMENT. The REMARKS on ORNAMENTED PLACES, as well as the MINUTES on our own PRACTICE, which are now first printed, are transcribed from the rough *memoranda*, that were written at the times of observation, or as the incidents and reflections occured.

ON the subject of PLANTING, too, will be found some additional information; more especially in the Sections WOODS, and TIMBER GROVES.

IT may also be right to mention, here, that we have omitted to insert, in this Edition, Mr. FARQUHARSON'S Paper on the

propagation of the *Scotch Fir;* a tree which, now, when the superior merits of the *Larch* are ascertained, can seldom be *planted* with propriety.

WE have likewise thought it right to omit some remarks on the SALE AND FELLING OF TIMBER; a subject which does not properly belong to *Planting*, and is much less compatible with *Rural Ornament*. We therefore confine this Work to the PRODUCTION OF WOODLANDS, whether useful or ornamental, and refer the Reader, for their GENERAL MANAGEMENT, a subject in itself of great extent and importance, to the different Works which we have published on RURAL ECONOMY: a list of which will appear at the close of these Volumes.

LONDON, *December* 1795.

PLANTING

AND

RURAL ORNAMENT.

GENERAL VIEW OF THE SUBJECTS.

THE earth produces an almost infinite variety of Plants, possessing various properties, and different degrees of strength and stature. In the vegetable, as in the animal world, the stronger subdue the weaker: the herbaceous tribes bow to the shrub, and this to the more robust forest tree; and, in an unpeopled country, a state of woodiness prevails. The interior parts of America are at this day a forest: the Continent of Europe, too, has still its forests; and England once was famous for her's.

As inhabitants increase, woodiness gives way to husbandry and the arts; not merely as an

incumbrance, but as affording useful materials. Population still increasing, the *forest* breaks into *woods*. Commerce and luxury advancing, the canoe becomes a ship, and the hut a mansion: at length even the woods dwindle away, and *plantations* or an *import of foreign timber*, become necessary to supply the want.

ENGLAND has experienced, more or less, every stage of this decline. Its present state, in respect to timber, we conceive to be this: A few broken forests, and many extensive woodlands, still remaining; a great number of plantations of different growths, and a vast supply of foreign timber of various kinds. Indeed, we are of opinion, that had it not been for this foreign supply, scarcely a timber tree, at this day, would have been left standing upon the island.

OUR existence, as a nation, depends upon a full and *certain* supply of shipping; and this, we may venture to say, upon an *internal* supply of ship timber. That there is no want of oak timber, at present, in this island, is, we believe, a fact; but that the article of *ship* timber is growing scarce, as we shall explain more fully in its proper place, is, we believe, also a fact which cannot be controverted. This is an important matter, which demands the first attention of Government, and is

not unworthy the notice of every landed individual.

MANKIND, however, do not view the face of nature in the light of selfpreservation only; the great Author of creation has wonderfully adapted our senses to the enjoyment of its delights; the eye is gratified by tints of verdure, and the ear by the music of the woods and the mellowness of echo—and both by the voice and majesty of a forest, roused by the breath of Nature. Our plan therefore, has two objects, UTILITY and ORNAMENT; they are nearly allied, however, as exercise and recreation, or as the use and the ornament of dress.

NEVERTHELESS, to treat of them with greater advantage, it will be proper to consider them separately, as two distinct subjects.

SUBJECT THE FIRST.

PLANTING.

DIVISION THE FIRST.

MANUAL OPERATIONS.

Introductory Remarks.

BEFORE we attempt to give directions for cultivating Woodlands, or raising Ornamental Plantations, it will be proper to give a comprehensive view of the Manual Operations incident to

Propagating, Planting and
Training Transplanting
Trees and Shrubs in general.

But before the young planter put his foot upon the spade, we beg leave to caution him, in the strongest terms, against a want of spirit in

Planting. A slovenly planter ranks among the most extravagant order of slovens: the labour, the plants, and the ground are thrown away; besides the consequent disgrace, not only to the individual, but to the Art itself. Anxious and interested as we are in the cause of planting, we would rather want pupils, than have them pass through our hands *unfinished*. We therefore reject all such as have not industry, spirit, and perseverance, to go through with what they undertake; and we recommended to such as are possessed of these valuable qualifications, *to begin upon a small scale*, and to let their seminaries, their nurseries, and their plantations, increase with their experience.

WHILE, however, we caution our readers against entering, immaturely, upon the business of planting, we cannot refrain from mentioning the PLEASURES which result from it. How rational, and to a contemplative mind how delightful, to observe the operations of Nature;—to trace her in every stage, from the seed to the perfected plant; and, from beneath the leaf stalk of this, through the flower bud, the flower, and the seed vessel, to the seed again! Man must be employed; and how more agreeably than in conversing with Nature, and in seeing the works of his own hands, assisted by her, rising into perfection.

NOR do we mean to hold out pleasure, alone, as an inducement to planting;—its PROFITS are great, when properly executed; and this idea adds solidity to the enjoyment. Pleasure alone may satiate; but profit and pleasure, united, seldom fail of producing a lasting gratification.

THERE is an other incitement to planting, which alone has been generally held out as a sufficient inducement. We are sorry to confess, however, that we know too much of mankind to believe that PATRIOTISM, unaided by personal interest, will ever produce a supply of ship timber to this or any other nation. Far be it from us, however fashionable it may be, to speak irreverently of patriotism; we consider it as the noblest attribute of the human mind. Young men, to whom we more particularly address ourselves, are seldom without some share of it; and we flatter ourselves that this virtuous principle, assisted by the pleasure, the profit, and the POPULARITY which attends planting, will induce the young men of the present age to study and practise it; not more for themselves, than for future generations.

SECTION THE FIRST.

PROPAGATING TREES AND SHRUBS.

TREES and SHRUBS are propagated

From SEEDS,	By LAYERING,
——SUCKERS,	— BUDDING,
——CUTTINGS,	— GRAFTING.

I. PROPAGATING FROM SEED.—There are four ways of raising, from seed, the trees and shrubs adapted to our purpose:

In Beds of natural Soil,
In Beds of Compost,
In Pots,—and some few
In Stoves, or under Glasses.

IT will be expected, perhaps, before we begin to treat of the different methods of sowing, that we give some directions for GATHERING and preserving seeds. Little, however, can be said upon the subject under this general head; different species requiring a difference in management. We may, nevertheless, venture to say, that all

seeds ought to be fully matured upon their native plants; and we may further add, that such as drop spontaneously from the seed vessel, or are shed by a moderate wind, or other gentle agitation, are preferable to those which are torn from the tree, immaturely. The seeds of scarce, or valuable plants may be gathered thus: As soon as they begin to fall, voluntarily, spread a cloth under the plant, and agitate it moderately, until all that are ripe have fallen;—and repeat this, whenever a second, and a third, spontaneous fall takes place.

THE art of PRESERVING seeds rests chiefly upon that of *curing* them, immediately after gathering. If grass were put into the stack, immediately after mowing, or corn threshed out, at harvest, and laid in heaps, it would presently heat, and be rendered useless. So it is with the seeds of trees and shrubs: therefore, they ought, as soon as they are gathered, to be spread thin, in an airy place, and be turned, as often as a close attention sees necessary. When the superfluous moisture has evaporated, they may be collected into bulk; remembering, however, to run them frequently down a skreen, or shake them in a sieve, that their brightness and sweetness may be preserved. Some of the larger seeds, acorns especially, are difficult to cure, and require a very strict attention.—It must also be remembered, that mice and other vermin are dangerous

enemies to seeds. Those which are particularly valuable, may be hung up, in bags, to the ceiling of a dry room.

IN PROCURING SEEDS from the SHOPS, or from ABROAD, some caution is necessary. A seedsman, who has a character to lose, and a correspondent, who is himself a judge of the quality of seeds, are the best general guards against imposition and disappointment.

THERE are several ways of TRYING THE QUALITY of seeds. The heavier kinds may be proved in water; such as swim are at least doubtful. The lighter sorts may be tried by biting them: if they break abruptly between the teeth, they are generally good; but if they be tough and leathery, they are mostly the contrary. If when crushed, or separated by a knife or scissars, they appear firm, white, and farinaceous, they may generally be esteemed good; but if, on the contrary, they be spungy and discoloured, they are generally of a bad quality. But the most certain mode of trial, and that which in cases of suspicion ought never to be omitted, is to *force* a few of them, in a garden pot, placed in an artificial heat, or other warm situation. Put in some certain number, taken promiscuously from the parcel, and, from the proportional number that vegetate, a tolerably just idea

may be formed of the quality of the whole. Without this precaution, a season may be lost, and the use of the land, together with the labour, be thrown away.

ALL the natives, and many exotics, may be raised in BEDS OF NATURAL MOLD. The *soil* should be rich, and sufficiently deep to admit of being trenched, or double dug, two spits deep. If it will not bear one spit and a half, namely about fourteen inches, it is improper for seed beds, and should either be wholly rejected, or (if the substratum is not of too barren and poisonous a nature) be trenched, a spit and a half deep, and the crude mold meliorated, by manure, and repeated diggings. Autumn is the best time to bring up the substratum, letting it lie in rough trenches all winter, to take the frost. In the spring, put on a quantity of dung, in proportion to the poverty of the soil; turning it in, superficially, and mixing it well with the soil to be improved. Repeat this single digging, through the summer, as often as convenient, or as often as the weeds, which never fail to rise, in great abundance, from a substratum exposed to the sun and air, require it. In autumn, turn up the soil from the bottom, and mix the whole well together. The longer the soil and substratum lie in the state of inversion, the better tempered the fresh

mold will become, and the mellower will be the old cultivated soil. In a manner similar to this, all soils, which are not naturally rich, ought to be treated. No department of planting calls more loudly for a spirited management than the seminary; which, if not rich and deep by nature, ought to be made so by art, at almost any expence.

IN large undertakings, a separate *seminary* may be necessary; but, in general, a portion of the kitchen garden is better adapted to the purpose. There are, indeed, two very great advantages, in mixing the seminary with the kitchen garden: the seed beds are always under the eye, and are more likely to be defended from weeds and vermin, there, than in a detached seminary, that is only visited occasionally; and, when the ground has borne a crop of seedling plants, it may be applied to the purpose of culinary herbs; while that which has been long under crops of these, may be changed to nursery beds. In whatever situation it is placed, it must be carefully fenced against hares and rabbits, or the labour of a whole season may be cut off in a few nights: in this light, also, the kitchen garden has a preference.

IT would be idle to give particular directions for laying out a seminary, or to say, under this general head, where this or that seed should be

sown. Suffice it, therefore, to mention, here, that *seed beds* are generally made from four to four feet and a half wide, with intervals of one foot and a half to two feet. These dimensions render them convenient to be weeded, without the plants being trodden or kneeled upon.

THE *methods of sowing* are various; as DIBBLING, DRILLING, and BROADCAST; which last is the most prevailing method. Seeds sown in the promiscuous broadcast manner, are covered either with the rake, or with the spade (or sieve). COVERING WITH THE SPADE (or sieve) is the common practice, and is thus performed: The surface being made light and fine, by a recent digging and raking, and the beds formed (operations which every gardener and gardener's man are acquainted with), a thin coat of mold is raked off the beds, into the intervals, in proportion to the depth the seeds require to be buried, and according to the nature of the soil, taken jointly. In a light sandy soil, the seeds require to be buried deeper than they do in a strong loam; and while an acorn may be covered from one to three inches deep, the seeds of the Larch will not bear more than from a quarter to three forths of an inch. The new surface being rendered perfectly fine and level, the seeds are sown, and, in some cases, pressed gently into the mold, by patting it with the back of the spade.

The earth, which was raked off into the interval (or taken off with a spade and placed in little hillocks in it) is now returned; either by casting it on with the spade, with a kind of sleight which nothing but practice can give, or by sifting it on, through a sieve (an operation more easy to the inexpert, and in many cases preferable) as even and regularly as possible. The intervals cleared, the beds neated up, and, if the soil be light, or the seed requires it, their surfaces patted with the back of the spade, so as to give them a kind of polished firmness, the business is finished. DRILLING is performed two ways; By drawing open drills, with hoes, in the common manner; or by taking off the surface of the beds, drawing lines upon the new surface, laying or scattering the seeds along these lines, and covering them with the spade or sieve, as above directed for broadcast sowing. DIBBLING requires no description.

THE next business of the seminary is to *defend* the seed and seedlings from *birds*, *vermin*, the *weather*, and *weeds*. Nets are the best guard against birds, and traps against vermin. As a defence against the scorching heat of the sun, the beds should be hooped, and mats occasionally spread over them, in the manner of a tilt or awning; but, when the scorching abates, the mats should be removed, to give the plants the benefits of the

atmosphere; and, in dry weather, the beds should be kept constantly watered. The awnings are equally safeguards against spring frosts, than which nothing is more injurious to seedling plants. In respect to WEEDS, there is a general rule, which ought not to be departed from; that is, not to suffer them to get too strong, before they be drawn; for, if they be permitted to form large roots, they not only encumber and rob the ground, but, in drawing them, many seeds, or tender seedlings, will be drawn out with them. To prevent the young plants from being DRAWN OUT OF THE GROUND BY WINTER FROSTS, which they are very liable to be, especially by a continuance of frost and thaw, alternately, coal ashes may be sifted over them. If this evil has already taken place, and the roots appear exposed above ground, some fine mold should first be sifted on, to cover the roots, and then the ashes sifted over the mold. the plants be BEATEN OUT OF THE GROUND BY HEAVY RAINS, the remedy is similiar.

THE length of time between the sowing of the seed and the appearance of the plant, is very uncertain: much depends upon the season, and still more upon the nature of the plant itself. Some seeds lie in the ground a whole year before they vegetate, and some two or three years,—as will be mentioned under their respective Species.

During this time the beds should be kept free from weeds and moss; and, in case of a long continuance of dry weather, should be well watered. After very heavy rains, which are liable to dissolve and wash away part of the surface soil, it is well to rake the beds slightly, and sift over them a little fresh mold: this prevents the surface from incrusting, and at once gives a supply of air, and of nourishment, to the embryo plants.

BEDS OF COMPOST are made by mixing drift sand, or other materials, with the natural soil of the seminary; or with virgin mold, taken from a rich meadow, or old pasture ground. But the particular ingredients of a compost depend upon the nature of the plant to be raised; and the reader is referred to the respective Species, in the ALPHABET OF PLANTS, for further information on this head.

THE mode of raising plants, in POTS and BOXES, also depends greatly upon the particular plant to be raised. The chief intent of this method is to guard the embryo and seedling plants from the extremes of heat and cold. The pots are filled with compost, suited to the plant. For examples, see the articles ANNONA, ARALIA, AZALIA, MELIA, PISTACIA, &c. &c.

II. PROPAGATING FROM CUTTINGS.

It is not from seeds, alone, that plants may be increased. So great a simplicity prevails in the system of vegetation, that numerous tribes may be propagated from twigs or truncheons, cut out of the woody parts of the plants themselves, and stuck naked into the ground, without either root or branch upon them: the part placed in contact with the soil sends forth roots, while that which is exposed to the open air, throws out branches!

BUT altho' most of the aquatics, and many other genera of trees and shrubs, may be raised from CUTTINGS, planted in common earth and in the open air, there are others which require more care and greater helps. Some require a warm, others a cool border: some must be rooted in pots, others in stoves, or in the greenhouse. Again, some should be taken from the older branches, others from younger shoots: some require to be planted in autumn, others in the spring. These and other peculiarities of treatment will be specified, when we come to treat, separately, of each individual.

III. PROPAGATING FROM SUCKERS.

There is a great similarity between the branches and the roots of plants. If the fibres of some

species become exposed to the air, they quit their function of supplying the parent plant with nourishment, and, taking upon them the nature of seedlings, put forth leaves and branches. These rootling plants are called SUCKERS; and if they be slipt off from the parent root, and planted in a soil and situation suited to their respective natures, they will grow up, in the manner of seedling plants.

VARIOUS opinions are held, respecting the propriety of raising trees and shrubs from suckers: EVELYN and MILLER are against the practice; saying, that plants raised from suckers are more apt to send up suckers (which are troublesome intruders, especially in ornamental grounds) than those of the same species which have been raised from seeds. HANBURY, however, is of a contrary opinion: he says, "What might incline people to this notion was, that they have observed trees raised from seeds very long before they produced suckers: but they should consider, that no tree or plant will produce suckers, till it is of a suitable size or strength for the purpose, any more than animals can produce young before they are of proper age; and let them plant a seedling that is grown strong, a layer of the same strength, and one which has been raised from a sucker, exactly of the same size, and with the same number of fibres to the

root, and they will find that the seedling, or the layer, will not be behind-hand with the other in producing suckers, if they have all a like soil and situation; for it is peculiar to them to sport under the soil, in this manner; and Nature will ever act agreeably to herself, if not stopped in her progress by art." Nevertheless, in speaking of particular plants, we find him holding forth a different language.

IV. PROPAGATING BY LAYERING.— As the roots of some plants, when exposed to the air, send forth shoots and branches, so the branches of others, when placed in contact with the earth, send out fibres and roots, which being severed from the parent plant, a separate tree is produced.

LAYERING being an operation by which a great majority of trees and shrubs may be propagated, and by which the many beautiful variegations are principally preserved, we shall here give some general directions for performing it; reserving, however, the minutiæ, peculiar to each species, until we come to treat of the individual species, separately.

LAYERS are bent, either from the *stools* of trees and shrubs, headed down to a few inches above

the surface of the ground, or from *boughs*, plashed so as to bend their tops to the ground; or from *trees* brought into a stooping posture, by excavating the soil on one side of them, until their heads are lowered into a similar situation.

STOOLS afford the simplest, and are the most common, supply of layers. Where a great number of layers are wanted, plants should be raised for the purpose, and planted in some well fenced ground, or in some vacant part of the seminary, or nursery; and, when of proper age and size, be headed down, to the height of about eight inches, for stools. In many cases, trees standing in grounds, or woods, may be cut down, and give a sufficient supply. In whatever situation they are, the earth round them must be doubly dug, as deep as the soil will allow, and be treated in a manner similar to that of a seed bed.

THE METHOD OF LAYERING is this: Dig a shallow trench round the stool (of a depth suitable to the size and nature of the plant, as from four to eight inches), and having pitched upon the shoots to be layered, bend them to the bottom of the trench (either with or without plashing, as may be found most convenient), and there *peg* them fast; or, putting some mold upon them, *tread* them hard enough to prevent their

springing up again;—fill in the mold;—place the top of the layer in an upright posture, treading the mold hard behind it;—and cut it carefully off, above the second or third eye.

IN this simple way a numerous tribe of plants may be layered: there are many, however, which require a more complex treatment. Some will succeed by having a *chip* taken off the under side of the lower bend of the layer, which gives the fibres an opportunity of breaking out, with greater freedom: others, by having a *cleft* made, in that part, by thrusting an awl or bodkin through it, keeping the cleft open, by a chip or wooden pin; or by making a longitudinal *slit in the bark* only: others succeed better, by *twisting* the part: and others, again, by *pricking* it, and binding a *wire* round it. But when SIMPLE LAYERING will not succeed, the most prevailing, and in general the most certain, method is that of TONGUE LAYERING; which is thus performed: The excavation being made, and the layer chosen and trimmed, ascertain where the lower bend of it will fall, by taking it in the left hand and bending it down to the bottom of the trench; then placing the thumb of the right hand firmly against the part opposite which the tongue falls, insert the edge of the knife, as with an intent to cut the layer off short, in that place; but having cut about half way thro' it, turn the

edge of the knife abruptly upwards drawing it along the pith, half an inch, or an inch, according to the size of the layer. The whole stool being treated in this manner, proceed to peg the layers close to the bottom of the trench, bedding the cleft or mouth of each in fine mold, for the fibres to strike into. (If the mold and the season be very dry, it may be well to moisten some fine mold with soft water, making it into a paste, and wrap the wounded part in a handful of this prepared earth.) This done, level in the mold, draw the point of the layer upright, and shorten it, as above directed; being careful to disturb the wounded part as little as possible. It is a practice with some to clear the stools, entirely, after layering: we would rather recommend, however, to trim off such shoots only as are too old, or are defective, leaving such as are too young, to increase in growth; by which means an annual, instead of a biennial, succession of layers will be had.

THE TIME OF LAYERING is generally autumn; spring is favourable to some plants, and midsummer to others; but trees and shrubs, in general, may be layered at almost any season of the year.

THE length of time requisite for ROOTING a layer depends upon the nature of the plant: twelve months is generally considered as a

sufficient time, during which the layers should be kept clear from weeds; and, when the rooted plants are taken off, the stumps, from which they were severed, should be cut off close to the stools, in order that they may send forth a future supply of shoots.

V. VI. BUDDING—AND GRAFTING are operations more particularly applicable to fruit trees, and belong to the *kitchen gardener* rather than to the *planter*. They are operations difficult to describe upon paper; and are known to every nurseryman and gardener. The great art in *grafting* lies in uniting the graft closely, and firmly, with the stock; and in *budding*, not to leave too much wood, nor yet to pare it off too close to the eye.

SECTION THE SECOND.

TRAINING TREES AND SHRUBS.

TREES and SHRUBS may be trained up from the seed bed, &c. until they be fit to be planted out to stand, either in NURSERIES set apart for the purpose, or in YOUNG PLANTATIONS; which last are frequently the most eligible nurseries, as

will be explained hereafter. A SEPARATE NURSERY, however, is nevertheless necessary; and in this place it will be proper to give some general ideas of the soil, situation, and business of a nursery ground.

THE SOIL of the nursery, like that of the seminary, should be rich and deep, and like that, also, should be prepared, by double diggings, and suitable meliorations: if not deep and rich by nature, it must be made so by art, or be wholly rejected, as unfit for the purposes of a nursery ground. For, if the roots of the tender plants have not a soil they affect, or a sufficient room to strike in, there will be little hopes of their furnishing themselves with that ample stock of fibres which is necessary to a good plant, and with which to supply them is the principal use of the nursery.

THE SITUATION of the nursery is frequently determined by the soil, and frequently by local conveniences: the nearer it is to the garden or seminary, the more attendance will probably be given it; but the nearer it lies to the scene of planting, the less carriage will be requisite. In whatever situation the nursery is placed, it must, like the seminary, be effectually fenced against hares and rabbits.

THE BUSINESS OF THE NURSERY consists principally in

PREPARING THE SOIL,	PRUNING THE NURSERY PLANTS,
PRUNING THE SEEDLINGS, &c.	THINNING THEM,
PUTTING THEM IN,	TAKING UP, AND
KEEPING THEM CLEAN,	PACKING FOR CARRIAGE.

THE PREPARATION OF THE SOIL has already been mentioned: too much pains cannot be taken, in this department; it is the foundation, upon which the success of the whole business greatly depends.

IN PRUNING seedlings, layers, and suckers, for the nursery, the ramifications of the roots should not be left too long and sprawling; but, *in this case*, should be trimmed off pretty close, so as to form a snug globular root. By this means, the new fibres will be formed immediately round the root of the plant, and may, of course, be easily removed with it, and without disturbing the earth interwoven among them. The tops should, in most cases, be trimmed quite close up to the leader, or (if aukward or defective) be cut off a little above the root.

IN PUTTING IN seedlings, various methods are practised; by the *dibble;* by the *scoop;* by a single

chop with the *spade*, or by two chops, one across the other: by *square holes*, made by four chops of the spade, bringing up the mold with the last; or by *bedding*; a method chiefly made use of for quicksets. If the soil be well prepared, and the plants properly pruned, the chief art, in putting them in, lies in not cramping the fibres of the roots; but, on the contrary, in letting them lie free and easy, among the mold: and the particular mode, or instrument to be made use of, depends much upon the size of the plants to be put in. This also determines, in a great measure, the proper *distance* between the rows and between plant and plant. Strong suckers or layers require larger holes, and a greater distance, than weak seedling plants. The proposed method of cleaning, too, is a guide to the distance: the plow cannot work in so narrow a compass as the spade. The natural tendency of the plant itself must also be considered; so that few general directions can be given, under this head. If we say from six to twenty-four inches in the rows, with intervals from one to four feet wide, we shall comprehend the whole variation of distances.

CLEANING THE NURSERY is a business which must not, of all others, be neglected: all plants are enemies to each other. If grass and weeds are suffered to prey upon the soil, the young

plants will be deprived of their proper nourishment and moisture: in short, it is necessary that the nursery should be kept equally clean as the seminary, and this as clean as the kitchen garden: it would be more pardonable to suffer the plants to be smothered in the seed bed than in the nursery quarters; for, in that case, only a small part of the expence would be thrown away. Nor is merely keeping the weeds under the only care in a nursery: the intervals must be kept stirred, in order to give air and freedom to the fibres. This may be done either with the spade, which is called turning in; or, if the intervals be wide enough, and the nursery extensive, with the plow, which is attended with less expence.

THE next business of the nursery is PRUNING: this is necessary, to prevent the plants from crouding each other, and to give them stem. Shrubs, which do not require a stem, should not be placed in nursery rows, but in the quincunx manner, that they may have an equal room to spread, on every side; but forest trees, and trees in general, require some length of stem; and, in giving them this, the leading shoot is more particularly to be attended to. If the head be double, one of the shoots must be taken close off: if it be maimed, or other ways defective, it may be well to cut the plant down

to the ground, and train a fresh shoot; or, if the head be taken off smooth, immediately above a strong side shoot, this will sometimes outgrow the crookedness, and, in a few years, become a straight plant.

THE time of the plants remaining in the nursery is determined by a variety of circumstances; and a seasonable THINNING frequently becomes necessary. In this part of the business there are general rules to go by: the shrubby spreading tribes should be thinned whenever their branches begin to interfere; and the stem plants, whenever their roots get into a similar state. If either the tops of the one, or the roots of the other, be suffered to remain in a state of interference and warfare with each other, the beauty of the shrubs will soon be destroyed, and the thriftiness of the trees will be checked. If the plants be wanted for planting out, it is fortunate; if not, every alternate plant should be moved to a vacant ground, prepared for the purpose. If such as stand in rows be removed, alternately, into the intervals, and set in the quincunx form, a temporary relief will be gained, at a small expence.

PLANTERS, in general, are not aware of the caution necessary in TAKING UP plants, for the purpose of planting them out to stand. *In this*

case, every root and every fibre ought, as much as possible, to be preserved. No violence should, therefore, be used in this operation. The best way is to dig a trench close by the side of the plant to be taken up; and, having undermined the roots, let the plant fall of itself, or with a very little assistance, into the trench: if any licentious root or roots still have hold, cut them off with some sharp instrument, so as to jar the main root as little as may be. If the root was properly pruned before planting, it will now turn out a globular bundle of earth and fibres, the best characteristic of a well rooted plant.

WHEN the nursery lies at a distance from the plantations, or when the plants are to be sent to some distant place, much depends upon PACKING them up judiciously. Valuable plants may be packed in pots or baskets;—straw may, however, in general be used, and will equally preserve them from frost in winter, and the drought of autumn or spring; especially if, in the latter case, the straw be occasionally moistened with soft water. Large plants should be packed, singly, with as much earth about the roots as conveniency will allow. If a piece of mat be put over the straw, it will save some trouble in cording, and be more effectual than straw alone.

SECTION THE THIRD.

PLANTING TREES AND SHRUBS.

ALL that we propose, in this place, is to convey to our readers some general ideas of

PREPARING THE SOIL,	AFTER PLANTING,
SEASON OF PLANTING,	CLEANING THE PLANTATION,
PRUNING AND SORTING THE PLANTS,	PRUNING THE YOUNG TREES, AND
PLANTING THEM OUT,	THINNING THEM,—
ATTENDING THEM	

in order to avoid useless repetitions, when we come to speak, separately, of each individual species; and to enable such of our readers as are wholly unacquainted with the subject, to follow us through the ALPHABET OF PLANTS with a degree of ease and satisfaction to themselves, which, without these previous instructions, they would not be able to do.

THE PREPARATION OF THE GROUND depends, in some measure, upon the size of the plants. To speak generally upon the subject—For plants under four feet high, the soil ought

to receive a double digging, or a summer's fallow under the plow, or a crop of turnips well hoed; but, for larger plants, separate holes, dug in the unbroken ground, are frequently made use of; though we cannot, by any means, recommend the practice. Trees and shrubs never thrive better, than when they are planted upon *made ground;* for here the fibres rove at large, and the nearer the soil of a plantation is brought to the state of made ground; that is to say, the more it is broken, and the deeper it is dug; the greater probability there will be of success. Plants put in holes may thrive very well, while the fibres have loose mold to work in; but, whenever they reach the firm unbroken sides of the pits, they will, except the soil be of a very rich loamy nature indeed, receive a check, which they will not overcome, for many years. The size of the holes, whether in broken or unbroken ground, must be in proportion to the roots of the plants to be put in. For large nursery plants, the holes, in unbroken ground, should not be less than two feet deep, and for plants from four to eight feet high, the holes ought to be made from two to four feet diameter: the different strata should be kept separate; laying the sod on one side of the hole, the corn mold or soil on another, and the substratum on a third; and in this state they may lie some weeks, before the time of planting.

THIS, namely the TIME OF PLANTING, varies with the species of plant, and with the nature of the soil. Plants, in general, may be set out either in the autumn, or in the spring. In a moist situation, the latter is generally preferable; provided the planting be not done too late. The latter end of February, and all March, is a very proper season for most plants: but where the scene of planting is extensive, every interval of open weather, during the six winter months, should be embraced. Some plants, however, are partial to particular seasons: these peculiarities will be mentioned, in their proper places.

IT has been already intimated, that, when trees and shrubs are planted out finally, their *roots* should be left UNPRUNED. It is usual, and may be proper, to take off the bruised and maimed parts; but even this should be done with caution. Their *tops*, however, require a different treatment. Forest trees, and other stem plants, may in general be trimmed closely; by which means the roots will be able to send up a sufficient supply of nourishment and moisture the first year, and thereby secure the life of the plant: whereas, on the contrary, if a number of side shoots be left on, the quantity of leaves and shoots becomes so great, that the plant probably is *starved*, for want of that necessary supply.

This renders the success of shrubby plants uncertain; and is an argument against their passing through the nursery; and, of course, in favour of their being moved (when practicable) from the seminary into the place in which they are intended to remain. A well rooted plant, however, if planted in a good mold and a moist season, will support a considerable top; and there is a general rule for the pruning of plants: Leave them tops proportioned to their roots; for no doubt the larger the top, provided the root can support it, the quicker progress the plant will make: nevertheless, it is well to be on the safer side; a sure though slow progress is preferable to a dead plant, which is always a reflection upon the planter, and an unsightly incumbrance in the plantation. A judicious planter, while he prunes his plants, will at the same time SORT them: instead of throwing them out of his hand into one heap, promiscuously, he will lay the weak ill rooted plants, in one place; the middle sort, in another; and the strong well rooted ones, in a third; in order that, when they are planted out, each plant may have a fair and equal chance of rising; which, without this precaution, cannot be the case.

WE now come to the operation of PLANTING; which is guided, in some measure, by the species of plantation. If the plants be large, and the plan-

tation chiefly ornamental, they ought to be planted out promiscuously in the situation in which they are intended to remain; but, if the plants be small, and the plantation chiefly useful, nursery rows ought generally to be preferred. For, in this manner, the tender plants give warmth to each other; the transition is less violent, than when they are planted out immediately from the nursery or seedbed, singly, and at a distance from each other: the ground is more easily kept clean, than where the plants stand in the random manner; besides, the intervals may, while the plants are young, be cropped with advantage: while the remainder of the intended plantation may be kept in an entire state of cultivation, until the plants acquire a considerable size; or, if the whole ground be stocked in this nursery manner, the superfluous plants may, in almost any country, be sold to great profit. We do not recommend planting these *nursery plantations* too thick; four feet between the rows and two feet between the plants are convenient distances; or, if the intervals be set out exactly a quarter of a rod wide, namely, four feet one inch and a half, and the plants be put in at twenty-four inches and three quarters apart, the calculation of how many plants will be required for an acre, or any other given portion of ground, or, on the contrary, how much ground will be necessary for a given number of plants, will be

made easy and certain. The method of putting in the plants, in these nursery rows, is this: The ground being brought to a proper state of cultivation, as directed above, the plants pruned and sorted, and the rows set out, a line is laid along, to make the holes by. To ascertain precisely the center of each hole, a mark is made in the line (or land-chain, which is not liable to be varied in its length by the weather), and a stick, or other guide, placed where the center of each hole falls. The workmen begin to make the holes, by chopping a ring round each stake, with the spade, of a diameter proportioned to the size of the plants, and of a depth equal to that of the cultivated mold. A row of holes being finished, the plants, in this case, may be immediately put in; which is done in this manner: One man, or boy, holds the plant upright, with its stem in the center of the hole, at the same time looking along the row, to see that it stands in its proper line, while another fills in the mold; first spreading the roots and fibres level in the bottom of the hole; being careful not to suffer any of them to lie in a cramping folded state; but opening them wide, and spreading them abroad in the manner of a bird's foot. While the planter is bedding the roots in the finest of the mold, the person who steadies the plant should move it very gently up and down, if small, but if larger, by a

circuitous motion of the top, in order to let in the mold more effectually among the fibres; which done, they should be pressed down gently together with the foot; and the treading, if the soil be light, should be repeated two or three times, until the hole be filled up round, and the plant firmly fixed, at the same depth at which it stood, in the place from whence it was taken. If, on trial, the hole be found too shallow, it must be deepened; if too deep, some of the roughest of the good mold must be thrown to the bottom, until the roots be brought to their natural level. The row being finished, the planter walks back along it, and adjusts such plants as lean or stand out of the line, while his helper distributes the plants of the next row. In a similar manner the plants are put in, when the holes are made in whole ground. The sods are generally thrown to the bottom of the hole; and, if these be not sufficient to raise the plant high enough, some of the substratum is mixed with them; or if this be of a very bad quality, some of the top soil is dug from the intervals, and thrown into the hole. The roots are bedded in the best of the mold, and the hole rounded up, either with the substratum or with the soil of the interval, so as to form a hillock or swell round the stem of the plant, in order to allow for the settling of the broken mold.

PLANTATIONS require a close ATTENDANCE AFTER PLANTING; especially in windy weather. Large plants are generally staked; but this is a practice we do not recommend, except for large transplanted trees or shrubs: but of these in the next Section. Plants, even of six or eight feet high, if well rooted and *firmly* planted, will withstand a great deal of weather. The plantation, however, should frequently be gone over, and such plants as have lost their upright posture, or are loose at the roots, should be righted and *rammed*; especially if the soil be of a light open texture: indeed, in such a soil, it is prudent to ram them, at the time of planting; which not only prevents their being misplaced by the winds, but also prevents the drought from reaching the roots so soon as when the mold is left light and porous. In this case, however, it must be remembered, that when the plants have got foothold, the mold which has been rammed should be loosened with the spade; in order to admit a full supply of air to the roots, without which no plant can flourish. If a continuance of drought set in, after planting, it will be prudent to WATER the plants*; not partially, by pouring a small quantity of water against the stem of each; but in large quantities,

* Provided the HOLES have not been previously WATERED; a precaution which, in a dry soil and a dry season, ought not to be omitted.

poured into a ring made near the outside of the hole; so that the whole mass of broken earth may be thoroughly moistened, without washing off the finer mold from the fibres. A superficial watering tantalizes the plants, and leads the fibres towards the surface for nourishment: the moisture, thus partially given, soon evaporates, and the disappointed fibres become exposed to the parchings of the sun and wind.

PLANTATIONS in rows are best CLEANED with the plow. In the spring, gather two furrows, or if room four furrows, into the middle of the interval: in summer, split these interval ridges, throwing the mold to the roots of the plants, to save them from the drought: in autumn, gather them again into the interval; and in winter, again return them to the rows, to keep out the frost. If the soil be good, and dung can be had, a row of potatoes, cabbages, &c. may be planted in each interval, or turnips sown over the whole: in either case, the interspaces of the rows should be kept clean hoed, or hand-weeded. In like manner, a promiscuous plantation should be dug, or turned in, at least once a year, during three or four years after planting.

As the plants increase in bulk and stature, they will require PRUNING. Much depends upon

doing this judiciously. If it has been neglected too long, care must be had not to do too much at once. The leader is the principal and first object; the side branches may be afterwards taken off gradually, so as not to wound the plant too much, nor let too much air, at once into the plantation. The time of pruning is generally considered to be in autumn or winter, when the sap is down, and the leaves off; but, for plants which are not liable to *bleed*, we rather recommend midsummer; as shoots taken off at that time, are not so apt to be followed by fresh shoots, as those taken off in winter. If the shoots be young and slender, it is better to *rub* them off, than to cut them off, clean, with a sharp instrument: boughs and strong shoots, however, require an instrument; and, from young trees, they should be taken off as smooth and close to the stem as possible. If a stump be left, it will be some years before it be grown over, and a flaw, if not a decayed place, will be the consequence; but if a shoot, or even a considerable bough of a young growing tree, be taken off, level with the bark of the stem, the wound will skin over the first year, and in a year or two, more, no traces of it will be left. A large bough of an aged full-grown tree requires a different treatment; which will be given under the article HEDGEROW TIMBER.

GREAT judgment is required in THINNING plantations. The same rule holds good in nursery plantations, as in the nursery itself: and the same general rule (liable no doubt to many exceptions) may be extended to woodlands, and ornamental plantations. But of these hereafter: suffice it to repeat, in this part of the Work, that whenever the roots of plants begin to interfere with each other, their growth, from that time, is more or less checked; and whenever their branches are permitted to clash, from that time their beauty and elegance are more or less injured.

SECTION THE FOURTH.

TRANSPLANTING TREES AND SHRUBS.

BY this is meant the removal of trees and shrubs, which, having formerly been planted out, have acquired some considerable size. We do not mean to recommend the practice, in general terms; but, for thinning a plantation, for removing obstructions, or hiding defects, or for the purpose of raising ornamental groups or single trees expeditiously, it may frequently be useful, and is universally practised; though seldom with uniform success. This is, indeed, the most

difficult part of planting, and requires considerable skill—with great care and attention in applying it.

IT is in vain to attempt the removal of a taprooted plant (as the oak), which has not previously been *tapped*; that is, its tap root taken off; and not less arduous to make a weakly rooted plant, of almost any species (the aquatics excepted), succeed with a large top upon it; much, therefore, depends upon taking up, and pruning, trees and shrubs for transplantation.

BEFORE a tap-rooted plant, which has never been removed from its place of semination, can be taken up with propriety, it must be tapped in this manner: Dig a trench or hole by the side of the plant, large enough to make room to undermine it, in such a manner as to be able to sever the tap-root; which done, fill in the mold, and let the plant remain in this state one, two, or three years, according to its size and age. By this time the horizontal roots will have furnished themselves with strength and fibres; especially those which were lopped in the excavation; and the plant may be taken up and removed, in the same manner as if it had been tapped and transplanted while a seedling, though not with equal safety; for plants that have never been removed, have long

branching roots, and the *fibres* lie at a distance from the body of the plant; while those which have been taken up, and have had their roots trimmed when young, are provided with fibres, which, being less remote from the stem, may be taken up with the plant, and conveyed with it to its new situation. This naturally leads to what will, perhaps, be called a *refinement*, in taking up large fibrous-rooted plants for transplantation; namely, lopping the whole, or a part of the horizontal roots, two years, or a longer time, before the plant be taken up; leaving the downward roots, and (if necessary) part of the horizontal ones, to support the plant until the time of removal*. It would be needless to add, that in taking up plants, in general, the greater length of root, and the greater number of fibres there is taken up, the more probable will be the success. It is also a circumstance well understood, that too much earth cannot be retained among the fibres.†

THE plant being thrown down, and the roots disentangled, it is proper, before it be removed from its place, to prune the top, in order that the carriage may be lightened. In doing this, a

* In this case the head ought, at the same time, to be pruned, and the plant, if exposed, to be supported.

† But see MINUTES 12 and 15.

considerable share of judgment is requisite: to head it down in the pollard manner, is very unsightly; and to prune it up to a mere maypole, or so as to leave only a small broom-like head at the top, is equally destructive of its beauty. The most rational, the most *natural*, and, at the same time, the most elegant, manner of doing this, is to *prune the boughs*, in such a manner as to form the head of the plant into a conoid, in resemblance of the natural head of the Lombardy poplar, and of a size proportioned to the *ability of the root*. Whoever was the inventor of this method of pruning the heads of trees, deserves infinite credit: it only wants to be known in order to be approved; and we are happy to see it growing into general practice.

THE mode of carriage rests wholly with the size of the plant: if small, it is best carried by hand, either upon the shoulder, or upon hand-spikes*:—if larger, two sledges, one for the root, the other for the head, may be used:—if very large, and the ball of earth be heavy, a pair of high timber wheels (guarded by a sack of hay or other soft substance), or a timber carriage, will be found necessary.

* See MINUTES, as above.

THE hole must be made wide enough to admit the root of the plant, with a space of a foot, at least, all round it, for the purpose of filling in the mold with propriety; so that if the tree was taken up with a root of eight feet diameter, the hole must be made of the diameter of nine or ten feet, and of a depth sufficient to admit of the tree's being seated (when the mold is settled) at its natural depth, as also to receive the sods, and other rough unbroken mold, at least a foot thick underneath its root.

THE method of planting depends upon the state of the root, and the temperature of the mold and the season. If the root be well furnished with fibres and mold, and the soil be moist from situation, or moistened by the wetness of the season, no artificial preparation is necessary. The bottom of the hole being raised to a proper height, and the tree set upright in the center of it, the mold may be filled in; being careful to work it well in amongst the roots, and to bed the fibres smoothly amongst it; treading every layer firmly, and, with a carpenter's rammer, filling every crevice and vacancy among the roots, so that no soft part nor hollowness remain; and proceed in this manner, until the hole be filled, and a hillock raised round the plant to allow for its settling. But if the roots be naked of mold, and thin of fibres,

and the soil, the situation, and the season be dry, we recommend the following method: The requisite depth of the hole being ascertained, and its bottom raised to a proper height, with some of the finest of the mold, pour upon it so much water as to moisten the loose mold, without rendering it soft, and unable to sustain the weight of the plant; and then proceed as above directed. If the transplantation be done in autumn, it will require nothing father at that time; but if in the spring, more water will immediately be wanted. Therefore, at once, draw a ring, some inches deep, near the outside of the hole, and, in the bottom of its channel, make six, eight, or ten holes (by means of an iron crow, or of a spike and beetle), at equal distances, and of a depth equal to that of the roots of the plant. These holes will not only serve to convey water, but air also, to the immediate region in which they are both indispensably necessary to the health of the plant. We have been the fuller in our instructions relative to transplanting, as being a process little understood by professional men. Every nurseryman, and almost every kitchen gardener, can raise, train, and plant out seedling and nursery plants; but the removal of trees seldom occurs in their practice; and we have met with very few men, indeed, who are equal to the task. The foregoing rules are the result of experience.

FOR farther experience in TRANSPLANTING, see MINUTES 12 and 15, in this Volume. And for farther remarks on Planting in general, see The RURAL ECONOMY of the MIDLAND COUNTIES, VOL. II. MINUTES 146 and 168.

DIVISION THE SECOND.

CHOICE OF TIMBER TREES.

SECTION THE FIRST.

CONSUMPTION OF TIMBER.

TIMBER is the great and primary object of planting. Ornament, abstracted from utility, ought to be confined within narrow limits. Indeed, in matters of planting, especially in the taller plantations, it were difficult to separate, entirely, the idea of ornament from that of use. Trees, in general, are capable of producing an ornamental effect; and there is no tree which may not be said to be more or less useful. But their difference in point of value, when arrived at maturity, is incomparable; and it would be the height of folly to plant a tree whose characteristic is principally ornament, when another, which is more useful and equally ornamental, may be planted in its stead.

THEREFORE, previous to our entering, at large, upon the business of planting, it will be proper to endeavour to specify the trees most useful to be planted. In attempting this, we must look forward, and endeavour to ascertain the species and proportional quantities of TIMBER which will hereafter be wanted, when the trees, now to be planted, shall have reached maturity. To do this with a degree of certainty, is impossible: Customs and fashions alter, as caprice and necessity dictate. All that appears capable of being done, in a matter of this nature, is, to trace the great outlines, and, by observing what has been permanently useful for ages past, judge what may, in all human probability, be useful in ages to come.

SHIPS,	MACHINES, and
BUILDINGS,	UTENSILS,

have been, are, and most probably will continue to be, the consumers of TIMBER, in this country. We will, therefore, endeavour to come at the principal materials made use of in the construction of these four great conveniences of life. Indeed, while mankind remain in their present state of civilization and refinement, they are *necessaries* of life, which cannot be dispensed with; and are consequently objects which the planter ought not to lose sight of, as they include, in effect, every thing that renders plantations useful; FENCE WOOD and FUEL excepted.

I. SHIPS are built chiefly of OAK: the keels however, are now pretty generally laid with ELM, or BEECH; and part of the upper decks of men of war is of DEAL: but these woods bear no proportion, in respect of the quantity used, to the Oak. The *timbers* of a ship are principally crooked, but the *planking* is cut out of straight pieces. In a seventy-four gun ship, the crooked and straight pieces used are nearly equal, but the *planking under water* is of FOREIGN OAK: therefore, of ENGLISH OAK, the proportion of crooked to straight pieces is almost two to one. Masts and yards are of DEAL. The blockmakers use Elm, Lignum-Vitæ, Box, and other hard woods. Upon the whole, it may be said, that, in the construction of a ship, OAK is the only ENGLISH WOOD made use of; and that, of this English Oak, nearly two thirds are requisite to be more or less CROOKED.

II. BUILDINGS. In the metropolis, and towns in general, DEAL is the prevailing wood made use of by the *house carpenter*: some OAK is used for sashes, also for window and door frames, and some for wall plates; but in places situated within the reach of water carriage, DEAL is becoming every day more and more prevalent: nevertheless, there are many inland parts of the country, where the house carpenters still continue to work up great quantities of OAK and ELM. The

joiner scarcely uses any other wood than DEAL, except in some inland and well wooded districts, where OAK is still in use for floors and staircases. Through the kingdom at large, perhaps three fourths of the timber used in the construction of buildings are FOREIGN DEAL.

III. MACHINES. This class comprehends MILLS and other MACHINES of MANUFACTORY, CARRIAGES of burden and pleasure, IMPLEMENTS OF HUSBANDRY, with the other articles necessary in rural affairs.

THE *millwright*'s chief material is OAK, and some CRABTREE, for cogs*.

THE *waggon and cartwright* uses OAK, for bodies; ASH, for shafts and axles; ELM, for naves, and sometimes for fellies and linings.

THE *plowright*'s sheet anchor is ASH: in some counties BEECH is substituted in its stead, for every thing but plow beams.

THE *coachmakers* use ASH, for poles, blocks, splinter bars, &c. ELM, for naves; generally

* As to the implements, utensils, and machines of manufactory, they are infinite; and various kinds of wood are worked up in making them.

ASH, for spokes and fellies; and RATTAN*, for pannels.

Gates and Fences are made of OAK and DEAL; sometimes of ASH, ELM, MAPLE, &c. but *posts* are, or ought to be, universally of OAK, CHESNUT, or LARCH;

Ladders, of DEAL, ALDER, WILLOW, OAK, &c.

Pumps and Water Pipes, of OAK, ELM, ALDER;

Wooden Bridges, *River Breaks*, and other *Waterworks*, principally OAK; some ELM and ALDER under water †.

IV. UTENSILS. Under this head we class FURNITURE, COOPER'S WARE, MATHEMATICAL INSTRUMENTS, TRUNKS, PACKING CASES, COFFINS, &c. &c.

THE *cabinetmakers'* chief woods are MAHOGANY and BEECH; next to these follow DUTCH OAK (Wainscot), DEAL, ELM; and lastly, WALNUTTREE, CHERRYTREE, PLUMTREE, BOX,

* The mahogany of the Bahama Islands.

† BEECH has lately been found to lie long under water; but for *waterwork* of every kind the LARCH is found to excel.

HOLLY, YEW, and a variety of woods for inlaying and cabinets. In some country places, a considerable quantity of ENGLISH OAK is worked up into tables, chairs, drawers, and bedsteads; but, in London, BEECH is almost the only English wood made use of, *at present*, by the cabinet and chair makers.

THE *carvers'* favorite wood is LIME, for picture and glass frames; DEAL, for coarser articles.

Coopers;—OAK (and some CHESNUT) for large casks and vessels: ASH, for dairy utensils, butter firkins, flour barrels, &c. OAK, for well buckets and water pails, and in some places, for milk pails, and other dairy vessels: BEECH, for soap firkins, &c.

Locksmiths, in Birmingham and Wolverhampton, work up a considerable quantity of OAK, for Lockstocks: chiefly the butts of trees.

Turners;—principally BEECH for large ware, if BEECH is to be had; if not, SYCAMORE, or other clean-grained wood: BOX, HOLLY, &c. for smaller utensils.

Mathematical Instrument Makers;—MAHOGANY, BOX, HOLLY.

Trunkmakers;—DEAL.

Packing Cases;—DEAL, POPLAR, &c.

Coffins;—OAK, ELM, DEAL.

AND, finally, the *lastmakers*, who work up no inconsiderable quantity of wood, use BEECH for lasts; ALDER and BIRCH for heels, pattenwoods, &c.

WE do not deliver the forgoing sketch as a perfectly correct account of the application of woods, in this country: the attempt is new, and that which is new is difficult. We have not omitted to consult with professional men upon the subject; and we believe it to be sufficiently accurate for the purpose of the planter. If we have committed any material error, we ask to be set right. We do not wish to descend to minutiæ: it would be of little use to the planter, to be told what toys and tooth picks are made from: it is of much more importance to him to know, that, of ENGLISH WOODS, the OAK is most in demand, perhaps three to one,—perhaps in a much greater proportion; that the ASH, the ELM, the BEECH, and the BOX, follow next; and that the CHESNUT, the WALNUT, and the PRUNUS and PINUS tribes, are principally valuable, as substitutes for OAK and FOREIGN TIMBER.

SECTION THE SECOND.

SITUATION AND SOIL.

IN the choice of timber trees, however, SITUATIONS and SOILS must ever be consulted. The *Oak*, in shallow barren soils, and in bleak exposed situations, cannot be raised with profit, as a timber tree; while the *Larch*, by out-growing its strength, sickens in deep rich soils.

IT is a fortunate circumstance for this country, that the two trees which are most likely to furnish its navy with an internal supply of timber, should delight in soils and situations of opposite natures; and every judicious planter will endeavour to assign to each its natural station.

The proper soils and situations, for other Timber Trees, will be found under their respective Names, in the ALPHABET OF PLANTS.

DIVISION THE THIRD.

HEDGES AND HEDGEROW TIMBER.

INTRODUCTORY REMARKS.

THE raising of LIVE HEDGES and HEDGEROW TIMBER constitutes no inconsiderable part of the business of planting. The value of good Hedges is known to every husbandman; and notwithstanding the complaints against Hedgerow Timber, as being liable to be knotty, &c. the *quality* of the timber itself is not questioned: its faultiness arises, wholly, from an improper treatment of the tree, and not from the situation of its growth. Indeed, we are clear in our opinion, that under proper management, no situation whatever is better adapted to the valuable purpose of raising SHIP TIMBER, than Hedges: The roots have free range in the adjoining inclosures, and the top is exposed to the exercise of the winds, with a sufficient space to throw out lusty arms, and form, at a

proper height, a spreading head. Thus, quickness of growth, with strength and CROOKEDNESS of Timber, are at once obtained.

WE are well aware of the injury resulting from woody Hedgerows to arable inclosures; but every man experienced in rural matters must be convinced, that it is not well trained Timber trees, but high Hedges, and low Pollards, which are the bane of corn fields. These, forming a high and impervious barrier, preclude the air and exercise, so essential to the vegetable, as well as the animal creation: in Norfolk, lands thus encumbered are, with great strength and propriety of expression, said to be *wood-bound*. Besides, Pollards and low-spreading trees are certain destruction to the Hedge wood which grows under them.

NEITHER of these evils, however, result from tall Timber Oaks, and a Hedge kept down to four or five feet high: a circulation of air is, in this case, rather promoted than retarded; and it is well known, that a pruned Hedge will thrive perfectly well under tall-stemmed trees, Oaks more especially. We will therefore venture to recommend, for arable inclosures, Hedges pruned down to four or five feet high, with Oak timbers of fifteen to twenty-five feet stem.

But, for grass lands, higher Hedges are more eligible. The grasses affect warmth, which promotes their growth, and thereby increases their quantity, though their quality may be injured. Besides, a tall fence affords shelter to cattle; provided it be thick and close at the bottom; otherwise, by admitting the air in currents, the blast is rendered still more piercing. The shade of trees is equally friendly to cattle in summer, as thick Hedges are in the colder months; therefore, in the Hedges of grass inclosures, we wish to see the Oak wave its lofty spreading head, while the Hedge itself is permitted to make its natural shoots: remembering, however, that the oftener it is cut down the more durable it will be as a fence, and the better shelter it will give to cattle; more especially if the sides be pruned the first and second years after cutting, in order to give it an upright tendency, and thicken it at the bottom.

Upon bleak hills, and in exposed situations, it is well to have two or even three rows of Hedge wood, about four feet apart from each other; the middle row being permitted to reach, and always remain at its natural height; while the side rows are cut down, alternately, to give perpetual security to the bottom, and afford a constant supply of materials for Dead hedges, and other purposes of Underwood.

HAVING thus given a general sketch of our ideas as to the different kinds of Hedges, and their effects on cultivated lands, we proceed to treat of the method of raising them. In doing this, it will be proper to consider,

1. THE Woods most eligible for Hedges.

2. THE time and manner of planting them.

3. THE manner of defending the young plants.

4. THE method of cleaning and training them.

5. THE after management.

SECTION THE FIRST.

SPECIES OF HEDGE WOODS.

THE SPECIES OF HEDGE WOOD depends, in some measure, upon soil and situation. That which is proper for a sound soil, in a temperate situation, may not be eligible for a marsh, or a mountain: and, indeed, a fence may be formed of any tree or strong shrub, provided it will thrive in the given situation. Nevertheless, there are

some species much more eligible than others; we particularize the following:

THE HAWTHORN.
THE CRAB BUSH.
THE AQUATIC TRIBE.
THE HOLLY.
THE FURZE.

THE HAWTHORN has been considered, during time immemorial, as the wood most proper for live fences. This pre-eminence, probably, arose from the seedling plants being readily collected, in woods and wastes; the method of raising them in seed beds, being formerly, and indeed in some parts of the kingdom even to this day, but little practised. The longevity of the Hawthorn, especially if it be frequently cropped, and its patience in cropping,—its natural good qualities as a live fence, and its usefulness as affording materials for dead hedges, are other reasons why it has been universally adopted. Another advantage of the Hawthorn—It will grow in almost any soil, provided the situation be tolerably dry and warm. However, if the soil hath not a degree of richness in itself, as well as a geniality of situation, the Hawthorn will not thrive sufficiently, nor make a progress rapid enough, to recommend it in preference, as a Hedge wood.

THE CRABTHORN, among the deciduous tribe, stands next: indeed, taken all in all, it may be said to rival the Hawthorn itself. Its growth is considerably quicker, and it will thrive in poorer soils, and in bleaker situations; and although it may not be so thorny and full of branches as the Haw-bush, yet it grows sufficiently rugged to make an admirable fence. Add to this, though its branches may not be preferable to those of the Hawthorn for *shooting* dead hedges, they undoubtedly afford a much greater quantity of *stakes*; and no wood (the Yew, the Larch, and the Chesnut excepted) affords better stakes than the Crab tree. The seedling plants, too, are readily raised, as the seeds of the Crab vegetate the first year. We do not mean, however, to force down the Crab bush upon our Reader as being, in a general light, preferable to the Hawthorn: we wish only to state, impartially, their comparative value; leaving him to consult his own situation and conveniency, and, having so done, to judge for himself. Nevertheless, from what has been adduced, we may venture to conclude, that upon a barren soil, and in a bleak situation, the Crab bush, as a Hedge wood, claims a preference to the Hawthorn.

THE AQUATICS. As the Crab excels the Hawthorn, upon bleak barren hills, so the Aquatics gain a preference, in low swampy grounds: for

although the Hawthorn delights in a moist situation, yet much stagnant water about its roots is offensive to it. Of the Aquatics, the *Alder* seems to claim a preference; its growth is more forked and shrubby than that of the Poplar or Willow; and its leaves are particularly unsavory to cattle. In point of ornament, however, it is exceeded by the *Black Poplar*, which, if kept pruned on the sides, will feather to the ground, and form a close and tolerably good fence.

THE HOLLY. Much has been said, and much has been written, of the excellency of Holly hedges: nevertheless, as fences to farm inclosures, they still exist in books and theory only; not having yet been introduced into general practice, we believe, in any part of the kingdom. Their superiority, however, whether in point of utility or ornament, is universally acknowledged. The perpetual verdure they exhibit, the superior kind of shelter they afford, during the winter months, and the everlastingness of their duration (an old decayed Holly being an object rarely to be seen in nature), all unite in establishing their excellency. How then are we to account for the scarcity of Holly hedges? The difficulty of raising them, and the slowness of their growth, have been held out as obstacles; and such they are, in truth; but they are obstacles arising rather from a want of

proper management, than from any cause inherent in the Holly itself. Thousands of young Hollies have been destroyed, by being planted out improperly, in the spring, at the time that the Hawthorn is usually planted: and the few which escape total destruction, by such injudicious removal, receive a check which cripples their growth, probably for several years.

We do not mean to intimate, that, by any treatment whatever, the progress of the Holly can be made to keep pace with that of the Hawthorn, or the Crab: and we are of opinion that it ought, by reason of the comparative slowness of its growth, to be raised *under* one or other of these two plants; more especially under the Crab, which, as has been observed, has a more upright tendency than the Hawthorn, and consequently will afford more air, as well as more room to the Holly rising under it.

But whilst we thus venture to recommend raising the Holly under the Crabthorn, we are by no means of opinion that it is difficult to raise a hedge of Holly alone. The principal disadvantage arising comparatively from this practice is, that the dead fence will be required to be kept up at least ten or twelve years, instead of six or seven; in which time a Crabthorn hedge, properly

managed, may be made a fence, and will remain so, without further expence, until the Holly become impregnable; when the Crab may either be removed, or permitted to remain, as taste, profit, or conveniency may point out.

THE Holly will thrive upon almost any soil; but thin-soiled heights seem to be its natural situation. We may venture to say, that where corn will grow, Holly will thrive abundantly; and Holly hedges seem to be peculiarly well adapted to an arable country: for, being of slow growth, and its perspiration being comparatively small, the Holly does not *suck the land* (as the Countryman's phrase is), and thereby rob the adjoining corn of its nourishment, so much as the Hawthorn; which, if suffered to run up to that unpardonable height, and to straggle abroad to that shameful width, at which we frequently see it, is not much less pernicious, in its effects upon corn land, than the Ash itself.

THE FURZE is rather an assistant Hedge wood, than a shrub which, alone, will make a fence. Upon light barren land, however, where no other wood will grow to advantage, tolerable fences may be made with Furze alone.

THERE is one material disadvantage of Furze, as

a live Hedge wood; the branches are liable to be killed by severe ſrosts, especially if the plants be suffered to grow tall, branchy, and thin at the bottom. It follows, that the best preservative against this malady is, to keep them cropped down low, and bushy; indeed, they are of little use, as a fence, unless they be kept in that state.

IN Norfolk, it is a practice, which of late years has become almost universal, to sow Furze seed upon the top of the ditch bank; especially when a new Hedge is planted. In a few years, the Furzes get up, and become a shelter and defence to the young quick; and, assisted by the high ditch bank prevalent in that country, afford a comfortable shelter to cattle in winter; besides supplying, at every fall, a considerable quantity of Farmhouse fuel.

SECTION THE SECOND.

METHOD AND TIME OF PLANTING HEDGEROWS.

I. THE FENCEWOOD. The method varies with the soil, and the time with the species of wood to the planted.

IN a low level country, ditches become useful, as main drains to the adjoining inclosures; but, in a dry upland situation, drains are less wanted; and here the planter has it in choice, whether he will plant with or without a ditch.

THE prevailing custom, taking the kingdom throughout, is to plant with a shallow ditch, laying the plants in a leaning posture against the first spit turned upside down, covering their roots with the best of the cultivated mold, and raising a bank over them, with the remainder of the excavated earth of the ditch, without any regard being had to the wetness or dryness of the situation. It is a striking fact, indeed, that in the vale of Gloucester—where large plots of naturally rich land are chilled with surface water, and reduced to little value, entirely thro a want of proper water courses—it is the custom to plant Hedges with a paltry grip of twelve to fifteen inches deep; while in Norfolk—a dry sandy country, where the natural absorbency of the substratum is seldom or ever satiated—it is the universal practice to raise Hedges with what is there called a "six-foot dyke;" and, when fresh made, they frequently run from six and a half to seven feet; measuring from the bottom of the ditch to the top of the bank.

WHAT may appear equally extraordinary, to the rest of the kingdom, the Norfolk Husbandmen, instead of planting the quick at the foot of the bank, among the corn mold, lay it in, near the top of their wall-like bank, among the crude earth, taken out of the lower part of the ditch. It is no uncommon sight, however, in that country, to see the face of the bank, with the quicksets it contains, washed down, by beating rains, for rods together. Nevertheless, if the plants escape this accident, it is astonishing to see the progress they will sometimes make, for a few first years after planting. But, as the roots enlarge, they become confined for want of room to range in; and the bank naturally moldering down by time, they are left naked and exposed. It is common to see young plants hanging, with their heads downward, against the face of the bank; and the mold continuing to crumble away from their roots, they at length lose their hold, and fall into the ditch.

IF we examine the unbroken flourishing Hedges of that country, of fifteen, twenty, and thirty years standing (for many such there are, especially in the Fleg Hundreds); we shall find them firmly rooted among the corn mold at the foot of the bank. Nevertheless, the Norfolk farmers, in general, are so closely wedded to the foregoing

practice, that no arguments are sufficient to convince them of its impropriety.

We confess ourselves partial to the superior abilities of the Norfolk Husbandmen, in their general management of rural affairs; and we hold established practices in Husbandry as things too respectable to be wholly condemned without a full and candid examination: we will therefore endeavour, in as few words as possible, to place the Norfolk practice of planting Hedges in its proper light.

There are not, generally speaking, any woodlands in Norfolk. The Hedges, it is true, especially of the eastern part of the county, are full, much too full, of wood, chiefly pollards. There are some few timber groves, scattered here and there: but we find none of those extensive tracts of coppice or underwood, in that county, which we see in other parts of the kingdom: consequently, the planter of Hedges experiences a scarcity of materials for temporary dead fences, having neither *stakes*, *edders*, nor *rails*, to make them with. Fortunately for him, however, the *soil* is of such a nature (a light sandy loam of great depth, without a single stone to check the spade), that by digging a deep trench, and raising a mound with the soil, none of those materials are

wanted. The face of the bank being carried upright, and a little brushwood set along the top of it, a sufficient fence is formed; while the depth of the ditch prevents cattle from browzing upon the young plants. By this means, Hedges are raised in Norfolk at a trifling expence, compared with the great cost bestowed upon them in some counties; where two rows of posts and rails are used, by way of temporary fences. But the difficulty in raising a live hedge, in the Norfolk manner, arises from the want of a proper place to plant the quicksets in. If it be put in, towards the top of the bank, as is usually done, the evil consequences abovementioned follow: if, on the contrary, it be laid in, near the bottom, the superincumbent pressure of the bank, and the want of moisture in this part of it, render the progress of the young plants slow, for the first three or four years; while those above, having loose *made ground* for their fibres to strike among, and having a sufficient supply of moisture collected from every shower, by the brush hedge, flourish apace; until the roots having grown too large for the bank, or the upper part of the bank itself having been washed down or moldered away, their career is stopt, at a time when those below, having struggled thro the bank, and finding an ample supply of air, moisture, and rich cultivated soil, to work among, are, in their turn, beginning to thrive; and their main roots being

firmly fixed in the soil itself, there is no fear of their afterwards receiving a check.

THUS it appears, that the Norfolk method has its advantage, as being cheap, with a disadvantage, arising from the want of a proper place to put the plants in.

THIS is easily obviated by planting with an OFFSET; that is—instead of continuing the face of the bank with one unbroken slope—to set it back a few inches, so as to form a break or shelf, where the quicksets are planted; for the obvious purpose of giving the young plants a sufficient supply of moisture, air, and pasturage, until their roots have had time to extend themselves to the adjoining inclosures.

THIS method of raising a Hedge is not a mere theoretical deduction, but has been practised with success, in different parts of the kingdom; and, in a soil free from stones and other obstructions of the spade, it is perhaps, upon the whole, the most eligible practice.

BUT the best live hedges we remember to have seen, in any part of this kingdom, grow in the neighbourhood of Pickering, in the North Riding of Yorkshire. These Hedges stand nearly upon

level ground, with little or no bank or ditch; so that the plants have free range for pasturage, on both sides; the shallow trenches, by which the quicksets have been planted, being now grown up; having, it is probable, never been scoured out since they were made. Indeed the assistance of a ditch is not wanted; no temporary fence whatever being requisite to be made, when the hedge is topped: the stems themselves are a sufficient barrier, standing in rows, like the heads of piles, and in such close order, that not a sheep, nor a hog, nor, in some places, even a hare, can creep between them. In a few years, those living piles throw out heads astonishingly luxuriant, and every six or seven years afford an ample and profitable crop of brushwood; and this without any expence whatever, except that of reaping it: whereas, in Norfolk, the renewal of the ditch and bank, when the hedge is cut down, is nearly equal to the first cost; besides the disadvantage resulting from cutting off all communication with the inclosure on the ditch side, and thereby robbing the hedge of half its natural food.

THEREFORE, where a ditch is not necessary as a drain, and where the nature of the substratum is such that it cannot be conviently sunk sufficiently deep to defend the young plants—the most elegible method, in such a situation, is to plant

the Hedge upon the LEVEL GROUND, without either bank or ditch, in the manner hereafter to be described; which method is now practised, in the neighbourhood abovementioned, with very promising success.

HAVING thus endeavoured to deduce from actual practice what may be called the *theory* of raising Hedges, we proceed to the application.

FROM what has been said, it appears that there are three distinct methods of raising a Live Hedge:

1. WITH a ditch and plain bank.
2. WITH a ditch and offset.
3. UPON level ground.

THE *first* has been already mentioned; and being familiar to every countryman, it is needless to enlarge upon it here.

THE *second* is to be practised, in wet situations, where surface drains are wanted, and where the ditch is necessary to be kept open; and likewise, in dry situations, where the subsoil is such that a ditch can be conveniently sunk deep enough,

to guard the young plants, in front, without an additional fence.

THE manner of executing it is this: The ground may either be prepared by fallowing with the plow, or the work may be lined out upon the unbroken ground. In either case, the plants should be set *upon* the natural level of the soil, and at the distance of three to twelve inches from the brink of the ditch. This, in ordinary situations, should be about four feet, say a quarter of a rod, wide at the top, and being brought to an angle at the bottom (or as near an angle as tools can bring it), its slope or sides should be about the same dimensions; the cavity of the ditch being made, as nearly as may be, an equilateral triangle. But, if the ditch be wanted as a main drain or common sewer, its width should be considerably greater; for, in this case, it cannot be *pointed* at the bottom, and must therefore have a sufficient width given it, at the top, to admit of its being made deep enough as a fence, and, at the same time, wide enough, at the bottom, to admit the given current of water. The bank should rise in front, with a slope similar to that of the ditch; but as the back should be carried more upright at the foot, swelling out full towards the top, in order to admit the insertion of a brush hedge; or, rather, if it can be conveniently had,

a dwarf stake-and-edder Hedge, which will effectually compleat the fence to the bank side; in either case, if any straggling spray overhang the young plants, it should be trimmed off, with some sharp instrument, or be beaten flat with the back of a shovel, to prevent its injuring the tender shoots.

THE *third* method, namely, planting without a ditch, is more particularly recommended for upland shallow stony soils. In executing this, the ground must be previously marked out, from four to six feet wide, be reduced to a fine tilth, and made perfectly clean, either by a whole summer's fallow, repeatedly stirred with the plow, or by cultivating upon it, in a husbandlike manner, a crop of Turnips, or, which is perhaps better, a crop of Potatoes; especially if a little dung can be conveniently allowed them. At the approach of winter, the soil being fine and clean, and the crop (if any) off, gather it up into a highish round ridge, or land, and thus let it lie till the time of planting; when, opening a trench upon the ridge or middle of the land, either with the spade or the plow, insert the plants, upright, filling in the mold, and pressing it gently to the roots, in the common nursery manner.

THE same precautions should be observed, in planting quicksets, that have been already

recommended, under the article TRAINING; namely, the plants should be sorted, as to their size, and should be either cut off within a few inches of the ground, or be pruned up to single stems.

THE *distance* should be regulated by the age and strength of the plants; from four to six inches is the usual distance; but if the plants have been previously transplanted from the seed bed, as they ought in general to be, and have acquired four or five years of age and strength, as we would always wish they should, from six to nine inches is near enough.

THE usual TIME OF PLANTING is during the spring months of February, March, and April; and, for the Hawthorn, the Crab, and the Aquatics, this is at least the most convenient season; but, for the HOLLY, as will be found under that article, in the ALPHABET OF PLANTS, summer is the properest time of planting.

WHERE much *ditching* is required, and hands scarce, the foundations of the banks may be laid, any time in winter, and left to settle, until the time of planting.

THUS far, we have been speaking of raising SINGLE HEDGES, whether of Hawthorn, Crab

Bush, or Holly; we will now say a word or two, as to the method of raising the HOLLY UNDER THE CRAB OR HAWTHORN. This may be done two ways; either by sowing the berries, when the quick is planted; or by inserting the plants themselves, the ensuing midsummer. The first is by much the simplest, but the least certain method. The seeds may either be scattered among the roots of the deciduous plants, or be sown in a drill in front of them: and if plants of Holly be put in, they may either be planted between those of the Crab, &c. or otherwise in front, in the quincunx manner; the tablet of the offset, when a ditch is made use of, being left broad for that purpose.

IF the FURZE be made use of, as an assistant Hedge wood, it is better to sow the seed on the *back* of the bank, than upon the *top* of it; for, in this case, it is more apt to overhang the young plants, in the face of the bank; while, in the other, it is better situated, to answer the purpose intended; namely, that of guarding the back of the bank, and of preventing its being torn down by cattle. The method of sowing the seed is this: Chop a drill, with a sharp spade, about two thirds of the way up the back of the bank, making the cleft gape as wide as may be, so as not to break off the lip; and having the seed in a quart bottle, stopt with a cork and goose quill, or with a perforated

wooden stopper, trickle it along the drill; covering it by means of a broom, drawn gently above, and over, the mouth of the drill. This is better than closing the drill entirely with the back of the spade, the seeds being sufficiently covered, without being shut up too close, while the mouth of the drill is left open, to receive the rain water which falls on the top of the bank. One pound of seed will sow about forty statute rods. What in Norfolk is called the *French* seed is the best, as the plants from this seldom mature their seeds, in that country; and consequently are less liable to spread over the adjoining inclosure. It may be had at the seed shops, in London, for about fifteen pence a pound.

If a fence be required of Furze alone, a similar drill should be sown on each side of the bank; and when the plants are grown up, the sides should be cut alternately.

II. Thus much as to planting the Fence; we now proceed to the method of planting HEDGE-ROW TIMBER. It has already been given in opinion, that no situation whatever is better adapted to the raising of ship timber, than Hedges; and we are clearly of opinion, that, in these alone, a sufficient supply, of crooked timbers at least, might be raised, to furnish perpetually the Navy

of Great Britain. It is a striking fact, that in Norfolk, where there is very little Oak, except what grows in the Hedges, and even in these, for one timber tree there are ten pollards, the country experiences no want of Oak timber.

BUT while we recommend the Oak, as eligible to be planted in Hedges, we condemn, as unfit for that purpose, every other tree (except, perhaps, the Aquatics in a marsh, the Beech and Pine tribe upon a barren mountain, or the Elm where Oak has lately occupied the soil) and more especially the Ash; not only as being the greatest enemy to the farmer, but because the excellency of Ash timber arises from a length of stem, and cleanness of grain: groves, therefore, and not Hedges, are the natural situation of the Ash.

THE method of raising the Oak in Hedges, may either be by sowing the acorns, or planting the seedlings, at the time of planting the fence wood: we would wish to recommend the practice of both; namely, to plant a well rooted thriving nursery plant (such as has previously been tapped and transplanted) at the distance of every statute rod; and, at the same time, to dibble round each plant three or four acorns, to guard against a miscarriage, and to give the judicious woodman a choice in the properest plant to be trained.

THIS distance may be objected to, as being too close; and so it may in a deciduous Hedge; but, in a Holly Hedge, we would not wish to see Oaks stand at a greater distance; for, situated in a Hedge, they have unlimited room to spread on either side; and, by standing near each other, they are more likely to throw out main branches, fit for ship timber, than they would if they had full head room. For this reason, it might not be amiss to plant at every half rod, and, when the Hedge is perceived to begin to suffer, to thin them in the manner most conducive to the ends proposed, holding jointly in view the Fence and the Timber.

SECTION THE THIRD.

DEFENDING THE YOUNG PLANTS.

LITTLE more remains to be said upon this head. The ditch, bank, and dwarf hedge have already been fully described; and this is by much the cheapest, and a very effectual, method, where it can be conveniently practised; but where the nature of the soil is such, that a ditch sufficiently deep, to defend the young plants, cannot be sunk but at too great an expence, some other expedient must be sought for.

POSTS and rails, wound with bushes in the Yorkshire manner, are an effectual fence; but they are expensive in the extreme.

IN Surrey and Kent, the prevailing practice is to set a strong stake-and-edder Hedge behind the quicksets, and throw rough bushes into a shallow ditch, in front: this in a coppice-wood country may be done at a reasonable expence; but it is by no means effectual.

IN some places, wattle Hedges are used; and in others furze faggots, set in close order, are found effectual, for this purpose: in short, almost every country affords its own peculiar materials, and every judicious planter will endeavour to find out those which are most eligible for the given situation.

SECTION THE FOURTH.

THE METHOD OF TRAINING.

MUCH, very much indeed, depends upon this part of the business: nevertheles, it is the common idea of planters of hedges, everywhere, that, having performed the business of *planting*, and

having *made* a fence sufficient to guard the plants, at the time of planting, *their* part is *finished;* the rest is of course left to nature and chance.

THE repairing of the fence;
THE cleaning, &c. of the plants; and the
TRIMMING or pruning them; are not however less necessary operations, than the planting and fencing; for without proper attention to those, the expence bestowed upon these is only so much thrown away. A single gap, especially where sheep are to be fenced against, may cause to be undone, in half an hour, what has been doing for two or three years.

IN this point of view, a deep ditch fence is preferable to one raised upon the ground; provided the ditch be kept *pointed;* for without this precaution, a ditch, unless it be very deep indeed, must not be depended upon, as a fence, either against cattle or sheep: but neither the one nor the other will trust themselves in a ditch, without a bottom for them to stand upon; nothing, indeed, is more terrible to them; especially if part of the mold be formed into a sharp banklet, placed on the outer brink of the ditch.

HARES are great enemies to young Hedges: a ditch fence is the best preservative against them

(paling or other close fences only excepted). An offset, however, is favourable to them; they will run along it, and crop the plants from end to end: therefore, where hares are numerous, a tufted branch of Furze, Thorns, Holly, or other rough wood, should be stuck, here and there, upon the platform, to prevent their running along it.

THE next business is WEEDING, either with the hoe or by hand; the former is more eligible, where it can be used; as breaking the earth about the roots of the plants is of great service.

FERN is a great enemy to young hedge plants; it is difficult to be drawn by hand, without endangering the plants; and, being tough, it is equally difficult to be cut with the hoe; and, if cut, will presently spring up again. The best manner of getting rid of it, when grown to a head, is to give the stem a twist, near the root, and let the top remain on, to wither and die, by degrees: this not only prevents its immediate springing; but appears to destroy the root.

THISTLES, docks, nettles, and other tall weeds, are also injurious to the tender plants, in robbing them of their nourishment, and drawing them up weak and slender, or smothering them outright, if not timely relieved by the fostering

hand of the planter. Even the grasses are offensive, and should be extirpated, with all the care and attention necessary in a seed bed or nursery.

NOR is it enough to defend the young plants from animal and vegetable intruders; the plants themselves must be taught, by judicious PRUNING, how to grow, so as to best answer the purpose for which they are intended.

THE Hawthorn is naturally a shrubby plant, throwing out strong lateral shoots, down close to the ground; more especially when planted by the side of a ditch, which, by giving room, favors this propensity. These horizontal branches, of course, draw off their share of nourishment from the root, which nourishment would be better expended upon the more upright shoots. They are, at the same time, in the weeder's way, and, by stretching out across the ditch, become a temptation to cattle. They should, therefore, from time to time, be struck off with a sharp instrument, either of the hook or the sabre kind.

IN performing this, one rule must be observed, invariably; that is, to leave the under shoots the longest, tapering the hedgeling upwards; being very careful, however, not to top the leading shoots; for, by doing this, the upward tendency

of the hedge will be checked; and, while its face is kept pruned in the manner here described, there is no fear of its becoming thin at the bottom.

THUS far we have been speaking of the method of training the SINGLE HEDGE, whether of Crab or Hawthorn. In raising the HOLLY, under either of these plants, a different kind of pruning is necessary; for, notwithstanding the Holly will struggle, in a remarkable manner, under the shade and drip of other plants, yet the more air and head room it is allowed, the greater progress it will make. In this case, therefore, the deciduous plants should be pruned to single stems, in the nursery manner; for all that is required of these is strength and tallness; the Holly being a sufficient guard at the bottom of the fence.

THIS may be thought an endless business, by those who have not practised it; but is it not equally endless to prune the young plants of a nursery? And we here beg leave to remind the young planter, that if he does not pay that care and attention to his hedgelings, in every stage of the business, as he does to his nursery rows, he is a stranger to his own interest. The advantage of obtaining a live fence, *on a certainty*, in seven or eight years, compared with that of *taking the chance* of one, in fifteen or twenty, is

scarcely to be done away by any expence whatever, bestowed upon planting and training it.

We are, indeed, so fully impressed with this idea, that we believe every Gentleman would find his account in having even his single Hedges trained with naked stems, in order that they might the sooner arrive at the desirable state above described,—*a range of living piles.* We wish to be understood, however, that we throw this out as a hint to those who wish to excel in whatever they undertake, rather than to recommend it, as a practice, to Hedge planters in general.

Nevertheless, we recommend, in general terms, and in the strongest manner, to keep the face of a young Hedge pruned, in the manner above described: or, if the plants be browzed by cattle, or otherwise become stinted and shrubby, to have them cut down, within a few inches of the ground; and by this and every other method promote, as much as possible, their upward growth. It is some time before a young Hedge becomes an absolute fence, against resolute stock; and the shortest way of making it a *blind*, is by encouraging its upward growth, to raise it high enough to prevent their looking over it; and, by trimming it on the sides, to endeavour to render it thick enough, to prevent their seeing

through it; giving it thereby the appearance, at least, of a perfect fence.

A HEDGE, pruned with naked stems, requires a different treatment, to perfect it as a fence. As soon as the stems have acquired a sufficient stability, they should be cut off, hedge height; and, in order to give additional stiffness, as well as to bring the live stakes into drill, some strong dead stakes should be driven in, here and there. This done, the whole should be tightly eddered together, near the top. As an adequate fence against horned cattle, the stems are required to be of considerable thickness; but as a sufficient restraint to sheep only, strong plants may be thus treated, a few years after planting; especially those of the Crab bush. Upon a sheep farm, pruning the plants would be eligible, were it only for the purpose of getting their heads out of the way of their most dangerous enemies.

SECTION THE FIFTH.

MANAGEMENT OF GROWN HEDGE-ROWS.

I. MANAGEMENT of the HEDGE. There is one general rule to be observed, in this business;—*cut often:* for the countryman's maxim is a good one;—" Cut thorns and have thorns."

THE proper length of time *between the cuttings* depends on the species of plant, the soil, and other circumstances: eight or ten years may be taken as the medium age, at which the Hawthorn is cut in most countries.

IN Norfolk, however, the Hedges are seldom cut under twelve to fifteen years; and are sometimes suffered to run twenty and even thirty years, without cutting! The consequence is, the stronger plants have, by that time, arrived at a tree-like size, while the underlings are overgrown and suffocated*: the number of stems are reduced in proportion, and, at that age, it is hazardous to fell the few which remain.

IN Surrey and Kent, seven or eight years old is the usual age at which the Farmers cut down their Quickset Hedges: and, in Yorkshire, they are frequently cut so young as five or six. This may be one reason of the excellency of the Yorkshire Hedges; for, under this course of treatment, every stem, whether strong or weak, has a fair chance: the weak ones are enabled to withstand so short a struggle, while the large ones are rather invigorated, than checked, by such timely cropping.

* For a remarkable instance of this, see MID. ECON. Vol. II. p. 383.

WITH respect to the *first cutting*, this also must be guided by circumstances: a full-stemmed thriving Hedge may stand from twenty to thirty years, between the planting and the first fall; but, if the plants get mossy, or grow shrubby and flat-topped, or put on any other appearance of being diseased or stinted; or, if they are unequal in strength, so that the weaker are in danger of suffering; or, if a young Hedge be much broken into gaps, or any other way rendered defective as a fence, the sooner it is cut down the better; for time will not mend it, and tampering with it will make it worse: whereas cutting it down, within a few inches of the ground, will give a salutary relief to the roots, and the fresh shoots will furnish a full supply of stems; without which no Hedge can be deemed perfect.

THE usual *time of cutting* is during the spring months of Febuary, March, April. The Hawthorn, however, may be cut any time in winter; and it is observable, that the shoots from the stools of Hedges cut in May, when the leaves were breaking forth, have been equally as strong as those from Hedges felled early in spring. This late felling, however, is not recommended as a practice; the brush wood, cut out at that time, being of less value, than that which is cut when the sap is down.

THE *methods of cutting* are various. In Surrey and Kent, the general practice is to fell to the ground, scour out the ditch, set a stake-and-edder Hedge behind or partially upon the stubs, and throw some rough thorns into the ditch:

IN Norfolk, there are two ways practised: one, to cut within a few inches of the face of the bank, remake the ditch and bank, and set a brush hedge as for the original planting: the other is called *Buckstalling*: which is to leave stems, about two feet long,—without repairing the bank or setting a Hedge; and only shovelling out the best of the mold of the ditch, to form the bottoms of dung-hills with. This is a much cheaper way than the other, and where the Hedge stands at the foot of the bank, and remains full stocked with stems, it is not ineligible; especially if a few of the slenderest of the old shoots be layered in, between the bank and the stems, and kept there by a coping sod, taken from the foot of the back of the bank. But when the roots lie high in the bank, and are of course more or less exposed by the soil's moldering away from them into the ditch, such treatment is destructive to the Hedge; which, in this case, requires to be cut down, within a few inches of the roots, every eight or ten years, the ditch to be scoured, and the bank to be faced and made fencible, by a brush Hedge. This circumstance,

alone, furnishes sufficient argument against planting high in the bank.

In Hertfordshire, Gloucestershire, and some parts of Yorkshire, *Plashing* is much in use. This is done by cutting the larger stems, down to the stub, and topping those of a middling size, hedge height, by way of stakes, between which the most slender are interwoven, in the wattle manner, to fill up the interstices, and give an immediate live fence. If live stakes cannot be had, dead ones are usually driven in their stead: and in order to keep the plashers in their places, as well as to bring the stakes into a line and stiffen the whole, it is customary, in most places, to edder such Hedges.

If the stems, alone, are not sufficient as a fence, this method of treatment may, in some cases, be eligible; provided it be properly executed. Much, however, depends upon the manner of doing it: many good Hedges have been injured by plashing. The plashers should be numerous, and should be pruned to naked rods, in order that their spray may not incommode the tender shoots from the stools below*: they should be laid in an ascending

* The most effectual method of preventing this evil,—as well as that arising from live stakes throwing out bushy tops, to the injury of the shoots from the lower stubs,—is to drive a line of dead stakes, a few inches from the line of stubs, and

direction, so that they may be bent without nicking at the root, if possible: such as will not stoop, without danger of breaking, should be nicked with an *upward*, not with a *downward* stroke: *that*, if properly done, gives a *tongue* which conducts the rain water from the wound; *this*, a *mouth* to catch it.

However, in cases where the *stems* stand regular, and are, in themselves, stiff enough for a Fence, or where they can be readily made so, by driving large stakes in the vacancies and weak places, plashing, and every other expedient, ought to be dispensed with:—where, upon examination, the stems are found insufficient, it is generally the best practice to fell the whole to the ground, and train a set of new ones.

In case of gaps or vacancies too wide to be filled up by the natural branches of the contiguous stools, they should be filled up by *layering* the neighbouring young shoots, the first or second year after felling; being careful to weed and nurse up the young layers, until they be out of harm's way. If such vacancies be numerous, it is best to

to wind the plashers among these stakes; thus leaving the young shoots a free air to rise in, and, at the same time, forming a live hedge to protect them. See more of this method of plashing, in MID. ECON. VOL. I. p. 92.

keep the whole Hedge, let its situation be what it may, trimmed low, in order to give air and headroom to the layers.

ALL fallen Hedges, whether layered or not, should be *pruned* on the sides, the first and second years after felling; at the same time *weeding* out the brambles, thistles, docks, and other rank *weeds*, whether herbaceous or ligneous; which, by crouding the bottom, prevent the young branches from uniting, and interweaving with each other.

THE proper time for performing this, is when the thistles are breaking into blow, before their seeds have acquired a vegetative body. The large Spear Thistle (*Carduus Lanceolatus*), so mischievous in young Hedges, and so conspicuously reproachful to the Farmer, when its seeds are suffered to be blown about the country, is a biennial plant, which does not blow till the second year; when, having produced its seed, the root dies: it is therefore unpardonable to neglect taking this in the crisis; for, by so doing, the whole race becomes at once extirpated.

THE fittest instrument for the purpose of striking off the side shoots, and for weeding, is a long hook, or rather a long strait blade with a hooked point, which is convenient for cutting out the

brambles and weeds, that grow in the middle of the Hedge, as well as for other purposes. We will venture to say, that whoever puts this piece of husbandry in practice once, will not neglect doing it a second time; the uses, as well as the neatness, resulting from it are numerous, and the expence of performing it little or nothing.

If the Hedge be intended to run up, either as a source of useful materials, or as a shelter in grass-land inclosures, the leading shoots should not be touched; nevertheless, it ought, in these two early trimmings, to be kept thin towards the top, leaving it to swell out thicker towards the bottom: but if it be intended to be kept down, as we have already said it ought to be, between arable inclosures, the leading shoots should be cropped low, both the first and the second year; in order to check its upward tendency, and give it a dwarfish habit; and the cropping must be repeated, from time to time, as occasion may require.

A Hedge under this treatment becomes a perpetual Fence, and its duration might be deemed everlasting. The age of the Hawthorn is probably unknown; but supposing that it will bear to be felled every ten years, for two hundred years, during which time there will be twenty falls of wood (what a mountainous pile for one slip of

land and one set of roots to produce!) may we not be allowed to suppose, that a similar hedge, kept in a dwarfish state (in which state its produce, and consequently its exhaustion, could not be one tenth so much as that in the former supposition) would live to the age of three or four hundred years? Tenants have only a temporary interest in the hedges of their respective farms; and it is the business of landlords, or their agents, to see that they are properly treated. The value of an estate is heightened, or depreciated, by the good or bad state of its fences; which, it is well known, are expensive to raise, and, when once let down, are difficult to get up again.

WITH respect to the *rough* and the *worn-out Hedges*, which constitute a large majority of the Hedges of this country, it is not an easy matter to lay down any precise rules of treatment: If the ground they grow in be sufficiently moist, they may be helped by felling, and layering, in the manner already described, or by filling up the vacancies with young quicks, or with the cuttings of sallow, elder, &c. &c. first clearing the ground from ivy, and other encumbrances; but, in a dry bank, which has been occupied by the roots of trees and shrubs for ages, and which, by its situation, throws off the rain water that falls upon it, there can be little hope either of plants or cuttings taking root, with advantage.

THE best assistance that can be given, in this case, is to drive stakes into the vacancies, and interweave the neighbouring boughs between the stakes, training them in the espalier manner: or, if the vacancies be wide, to plash tall boughs into them.

THESE, however, are only temporary reliefs; for, if the bodies of the plants themselves be suffered to run up, and to draw the nourishment from the plashers, the breaches will soon be opened again, and it will be found difficult to fill them up a second time: the only way by which to render this method of treatment in any degree lasting, is, to keep the whole hedge cropped down, as low as the purpose for which it is intended will permit; weeding it with the same care as a young Hedge. By this means the vacancies in time will grow up, and one regularly interwoven surface will be formed.

AFTER all, however, an old worn-out Hedge, with all the care and attention that can be bestowed upon it, cannot continue for any length of time; and whenever it verges upon the last stage of decline, it is generally the best management to grub it up at once, and raise a new one in its place; otherwise the occupier must be driven, in the end, to the humiliating and

disgraceful expedient of patching with dead Hedgework.

We are happy in having it in our power to say, that the practice of *replanting* Hedges has, of late years, become prevalent in a county which has long taken the lead in many important departments of husbandry; and, although we have had occasion to censure some of its practices, with respect to Fences, we have great pleasure in giving to it due praise, in this particular; we speak of the county of Norfolk. The best way is to level the old bank, about michaelmas, in order that the mold may be thoroughly moistened by the winter's rains, and tempered by the frosts. The roots and old stems will, in general, more than repay the expence of grubbing and levelling, and when the old stools are numerous, and fuel is dear, will, sometimes, go a good way towards raising the new Fence. One great advantage, arising from this practice, in an arable country, is doing away the crookedness of old Hedges.

There is one general rule to be observed, in renewing a Hedge in this manner, which is to plant a species of Hedgewood different from that which formerly occupied the soil; and we know of no better change, after the Hawthorn, than the Crab tree and the Holly.

II. MANAGEMENT OF HEDGEROW TIMBER.—Having mentioned the several methods of raising and repairing LIVE HEDGES*, we now come to the training, and general treatment, of HEDGEROW TIMBER: and, first, as to the young Oaks, which we recommended to be planted with the Hedgewood.

THE most eligible length of stem has been mentioned to be from fifteen to twenty-five feet; and, with due attention to their leading shoots, there will be little difficulty in training them, on a good soil, to that or a greater height. If, by accident or disease, the head be lost, the stem should be taken off at the stub, and a fresh shoot trained. However, in this case, if the Hedge be got to any considerable height, it is best to let the stump stand, until the first fall of the Hedgewood; for, then, the young tree may be trained up with less difficulty.

NEXT to the danger of the young trees being cropt by cattle, is that of their being hurt by the Hedgewood: first, from their being overhung and

* For farther remarks on this subject, see YORK. ECON. Art. FENCES; and MID. ECON. under the same Title.

smothered amongst it; secondly, from their being drawn up too tall and slender; thirdly, from their being chafed against the boughs by the wind; and, lastly, from their stems getting locked in between the branches, so as to cause an indenture in the stem, and thereby render it liable to be broken off by the wind. The simplest way of guarding against these evils, is, to keep the Hedgewood down to fence height; otherwise, great care and attention are requisite in training Hedge timber. Even in this case, the plants should be frequently looked over,—to see that the lower parts of them do not interfere with the stems of the Hedgewood,—to take off, as occasion may require, the lateral shoots,—and to give simplicity and strength to the leaders, until the plants have acquired a sufficient length of stem.

WHEN this is obtained, it may not be amiss to endeavour to throw the general tendency of the head to one or the other side of the Hedge, in order to give air and head room to the plants, and *crookedness* to the timber. Finally, if trees in Hedges are not treated with the same attention as those in Nurseries and Plantations, it were better not to plant them; as they will become an incumbrance to the Hedge, without affording either pleasure, or profit, to the planter, or his successors.

WHAT remain now to be considered are, the GROWN TIMBERS; the TIMBER STANDS, and the POLLARDS with which old Hedges are frequently stored.

THERE is not a more absurd practice, in the circle of rural affairs, than that of making FALLS of HEDGEROW TIMBER; which is neither more nor less than for the woodman to begin at one end of the Hedge, and hack down every timber tree, indiscriminately, whether full-grown, over-grown, or but half-grown, until he reach the other. The impropriety is the same, whether a young thriving tree be taken down, before it has arrived at its full growth, or an old one is suffered to remain standing, after it has entered the stage of decline.

A TIMBERED estate should frequently be gone over, by some person of judgement; who, let the price and demand for timber be what they may, ought to mark every tree which wears the appearance of decay. If the demand be brisk, and the price high, he ought to go two steps farther, and mark not only such as are full grown, but such, also, as are near perfection; for the interest of the money, the disencumbrance of the Hedge and the neighbouring young timbers, and the comparative advantages of a good market, are not

to be bartered for any increase of timber, which can reasonably be expected from trees in the last stage of their growth.

THERE are men in this kingdom, who, from mismanagement of their timber, are now losing annually, very handsome incomes. The loss of price which generally follows the refusal of a high offer, the certain loss of interest, the decay of timber, and the injuries arising from the encumbrance of full-grown trees, are irretrievable losses, which those who have the care and management of timber should studiously endeavour to avoid.

BUT while we thus hold out the disadvantages of suffering timber to stand until it be overgrown, it is far from our intention to recommend, or even countenance, a premature felling,—of Hedgerow timbers more particularly: for although, in woods and close groves, a succeeding crop of saplings may repair, in some degree, the loss of growth, in timber untimely fallen; yet it is not so in Hedges,—where sapling stands are liable to be spilt off from the stool, as soon as they acquire any considerable top; as being exposed singly, and on every side, to the wind: and all that can be expected from the stools of trees in Hedgerows, is a sufficiency of shoots to fill up the breaches in the Hedge.

WITH respect to POLLARDS* in Hedges, some general rules are observable. Pollards, which are fully grown, but yet remain sound, should be taken down, before they become tainted at the heart;—for a good gate post is worth five shillings; but a firing Pollard, of the same size, is not worth one shilling. Firing Pollards which, by reason of their decay, or stintedness, will not, in the course of eighteen or twenty years, throw out tops equal in value to their present bodies, should also be taken down;—for the principal and interest of the money will be worth more, at the end of that time, than the body and top of the Pollard; besides the desirable riddance of such unsightly encumbrances. But, in case a Pollard is already so much tainted as to be rendered useless as timber, yet sound enough, to all present appearances, to throw out, in the time above mentioned, a top or tops of more than equal value to its present body;—it rets upon a variety of circumstances, whether, in strict propriety of management, such Pollard ought to stand or fall.

WE declare ourselves enemies to Pollards; they are unsightly; they encumber and destroy the Hedge they stand in (especially those whose

* Trees which have been *polled*, topt, or headed down to the stem.

stems are short), and occupy spaces which might, in general, be better filled by timber trees; and, at present, it seems to be the prevailing fashion to clear them away: nevertheless, in a country, in which woodlands and coppices are scarce, Hedge pollards furnish a valuable supply of fuel, stakes, &c.—and every man who clears away the class of Pollards last-mentioned, without planting an adequate quantity of coppice wood, commits a crime against posterity: more especially in a district which depends wholly upon the sea for a supply of coals. For, although Great Britain is, at present, mistress of her own coast, what man is rash enough to say, that, amidst the revolutions in human affairs, she will always remain so?

WITH respect to the YOUNG TIMBERS, which frequently abound in rough Hedgerows, we venture to recommend the following management.

UPON estates whose Hedge timber has been little attended to (and, we are sorry to say, such are nine tenths of the estates in the kingdom), the first step is to set out the plants, and clear away the encumbrances.

AFTER what has been said, it may be needless to repeat, here, that, where the choice rests upon the species of tree, the Oak should invariably be

chosen; for every other species we consider as a kind of encumbrance, which ought to be done away, as soon as it can with any colour of propriety.

It is bad practice to permit Hedges to remain crouded with timber stands; they should, in general, be set out singly, and at distances proportioned to their respective sizes; so that their tops be not suffered to interfere too much with each other.

There is, however, one exception to this rule: where two trees, standing near each other, have grown up, in such a manner, that their joint branches form, in appearance, but one top, they should both be permitted to stand; for if one of them be removed, the other will not only take an unsightly outline, but will receive a check in its growth, which it will not overcome for several years. It is, nevertheless, observable, that twin trees, as well as those which are double stemmed, are dangerous to stock: not only cattle, but even horses, have been known to be strangled, by getting their heads locked in between them.

The method of training the young plants has already been described; it now only remains to say a few words, as to the Pruning and Setting up Hedgerow timbers.

LOW-HEADED trees have been already condemned, as being injurious to the Hedge, as well as to the Corn which grows under them. To remove or alleviate these evils, without injuring the tree itself, requires the best skill of the woodman. The usual method is to hack off the offending bough; no matter how nor where; but, most probably, a few inches from the body of the tree, with an axe; leaving the end of the stump ragged, and full of clifts and fissures, which, by receiving and retaining the wet that drips upon them, render the wound incurable. The mortification, in a short time, is communicated to the stem, in which a recess or hollow being once formed, so as to receive and retain water, the decline of the tree, though otherwise in its prime, from that time, must be dated; and, if not presently taken down, its properties, as a timber tree, will, in a few years, be changed into those of firewood only. How many thousand timber trees stand, at this hour, in the predicament here described; merely through injudicious treatment! It is this improper treatment, which has brought Hedgerow timber into a disrepute, otherwise undeserved.

THERE is a wonderful similarity in the operations of Nature upon the Vegetable and the Animal Creation. A slight wound in the Animal Body soon heals up, and skins over, while the

wound succeeding the amputation of a limb, is with difficulty cicatrized. The effects are similar with respect to the Vegetable Body: a twig may be taken off with safety, while the amputation of a large bough will endanger the life of the tree. Again, pare off a small portion of the outer bark of a young thriving tree, the first summer's sap will heal up the wound; if a small twig had been taken off with this patch of bark, the effect would have been nearly the same; the wound would have been cicatrized, or barked over, in a similar manner; and the body of the tree as safely secured from outward injury, as if no such amputation had taken place. Even a considerable branch may be taken off, in this manner, with impunity, provided the surface of the wound be left smooth and flush with the bark of the Tree; for, in a few years, it will be completely closed up, and secured from injury; though an eschar may remain for some years longer. But if a large bough be thus severed, the wound is left so wide, that it requires, in most trees, a length of time to bark it over; during which time, the body of the tree having increased in size, the parts immediately round the wound become turgid, while the face of the wound itself is thrown back into a recess; and, whenever this becomes deep enough to hold water, from that time the wound is rendered incurable: Nature has, at least, done her part; and, whether

or not, in this case, assistance may be given, by opening the lower lip of the wound, remains yet (it is probable) to be tried by experiment: until that be ascertained, or some other certain method of cure be known, it were the height of imprudence to risk the welfare of a Tree on such hazardous treatment.

FURTHER, although a branch of considerable size may be taken off, close to the body of the Tree, with safety; yet, if the same branch be cut *a few inches* from it, the effect is not the same; for, in this case, the stump generally dies; consequently, the cicatrization cannot take place, until the stem of the Tree has swelled over the stump, or the stump has rotted away to the stem; and, either way, a mortification is the probable consequence. Even supposing the stump to live, either by means of some twig being left upon it, or from fresh shoots thrown out, the cicatrization, in this case, will be slow (depending entirely upon the feeble efforts of the bark of the stump); and before it can be accomplished, the Tree itself may be in danger. But, had the amputation been made *at a distance* from the stem, and immediately *above a twig*, strong enough to draw up a supply of sap, and keep the stump alive, with certainty, no risk would have

been incurred; especially if the end of the stump had been left smooth, with the slope on the under side, so that no water could hang, nor recess be formed.

FROM what has been said, the following general rules, with respect to setting up low-headed trees, may, we humbly conceive, be drawn with safety: *small boughs should be cut off, close to the stem; but large ones, at a distance from it; and above a lateral branch, large enough to keep the stump alive.* Thus, supposing the stem of a tree, in full growth, to be the size of a man's waist, a bough the thickness of his wrist may be taken off, with safety, near the stem; but one as thick as his thigh should be cut at the distance of two feet from it, at least: leaving a side branch, at least an inch in diameter, with a top in proportion, and with air and head-room enough to keep it in a flourishing state. For this purpose, as well as for the general purpose of throwing light into the head, the standing boughs should be cleared from their lower branches, particularly such as grow in a drooping direction. In doing this, no great caution is required; for, *in taking a bough from a bough*, let their sizes be what they may, little risque can be thereby incurred, upon the *main body of the tree.*

THERE is another general rule, with regard to pruning trees. The bough should be taken off, either by the *upward stroke* of a sharp instrument (and, generally speaking, *at one blow)*, or with a saw: in the latter case, it should previously be notched, on the under side, to prevent its splitting off, in the fall. If the bough to be taken off be heavy, the safest way is, first to cut it off, a few inches from the stem, with an axe, and then to clear away the stump, close and level, with a saw; doing away the roughnesses, left by the teeth of the saw, with a plane, or with a broad-mouthed chissel, or an axe; in order to prevent the wet from hanging in the wound. A saw, for this purpose, should be set very wide; otherwise, it will not make its way through green wood.

THE fittest opportunity for pruning and setting up young timbers, as well as for taking down Pollards and dotard timbers, and clearing away other encumbrances, is when the hedge itself is felled; and it were well for landed individuals (as for the Nation at large) if no Hedge was suffered to be cut down, without the whole business of the Hedgerow being, at the same time, properly executed.

FOR farther Information respecting HEDGES and HEDGEROW TIMBER, see the RURAL ECONOMY of YORKSHIRE, Vol. I. p. 201.

ALSO the RURAL ECONOMY of the MIDLAND COUNTIES, Vol. I. pages 83 to 95, and the MINUTES thence referred to.

FOR general remarks on training up Hedgerow Timber, and the management of Oakland Hedgerows, see WEST OF ENGLAND: District the sixth: Sect: improvement of WEST DORSETSHIRE, &c.

DIVISION THE FOURTH.

WOODLANDS; OR, USEFUL PLANTATIONS.

INTRODUCTORY REMARKS.

ALTHOUGH it may be difficult to distinguish, precisely, between *useful* and *ornamental* plantations, yet the distinction between a rough coppice, in a recluse corner of an estate, and a flowering shrubery, under the windows of a mansion, is obvious: the one we view as an object of *pleasure* and amusement, while the other is looked upon in the light of *profit*, only. Upon these premises we ground our distinction. Under the present head, we purpose to speak of plantations, whose leading features are of the more useful kind, and whose principal end is profit; reserving those, whose distinguishing characteristic is

ornament, and whose primary object is pleasure, for the SECOND PART of this VOLUME.

PERHAPS, it will be expected, that, before we begin to treat of the propagation of TIMBER, we should previously prove an approaching SCARCITY of that necessary article in this country: for it may be argued, that every acre of land applied to the purposes of planting, is lost to those of agriculture; and, as far as *culturable* land goes, the argument is just. To speak of this subject, generally, as to the whole kingdom, and at the same time precisely, is perhaps what no man is prepared for.

FROM an extensive knowledge of the different parts of the kingdom, we believe that the Nation has not yet, experienced any real want of timber. We are happy to find, that, in many parts of it, there are great quantities now standing; while, in many other parts, we are sorry to see an almost total nakedness. With respect to large well grown OAK TIMBER, such as is fit for the puposes of SHIP BUILDING, we believe there is a growing scarcity, throughout the kingdom.

WE will explain ourselves, by speaking particularly as to one district—the VALE OF PICKERING, in Yorkshire. This district, for ages past, has

supplied, in a great measure, the ports of Whitby and Scarborough with ship timber. At present, notwithstanding the extensive tracts of Woodlands still remaining, there is scarcely a tree left standing with a load of timber in it. Besides, the woods which now exist, have principally been raised from the stools of timber trees, formerly taken down; the saplings from which being numerous, they have drawn each other up slender, in the grove manner; and, consequently, never will be suitable to the more valuable purposes of the ship builder.

WHEN we consider the prodigious quantity of timber which is consumed in the construction of a large vessel, we feel a concern for the probable situation of this country, at some future period. A SEVENTY-FOUR GUN SHIP (we speak from *good authority*) swallows up three thousand loads of Oak timber. A load of timber is fifty cubical feet; a ton, forty feet; consequently, a seventy-four gun ship takes 2,000 large well grown timber trees; namely, trees of nearly two tons each!

THE distance recommended, by authors, for planting trees, in a *Wood*, (a subject we shall speak to particularly in the course of this chapter) in which Underwood is also propagated, is thirty feet or upwards. Supposing trees to stand at two

rods (33 feet, the distance we recommend they should stand at, in such a plantation), each statute acre would contain 40 trees; consequently, the building of a seventy-four gun ship would clear, of such Woodland, the timber of 50 acres. Even supposing the trees to stand at one rod apart (a short distance for trees of the magnitude above-mentioned), she would clear twelve acres and a half; no inconsiderable plot of Woodland. When we consider the number of king's ships that have been built during the late wars, and the East Indiamen, merchants ships, colliers, and small craft, that are launched daily in the different ports of the kingdom, we are ready to tremble for the consequences. Nevertheless, there are men who treat the idea of an approaching scarcity as being chimerical; and, at present, we will *hope* that they have some foundation for their opinion, and that the day of want is not near. At some future opportunity, we may endeavour to reduce to a degree of certainty, what at present is, in some measure, conjectural. The present state of this island with respect to ship timber is, to the community, a subject of the very first importance.

HOWEVER, in a work like the present, addressed to individuals, rather than to the nation at large, a true estimate of the general plenty or scarcity of timber is only important, as being instrumental in

ascertaining the local plenty, or scarcity, which is likely to take place in the particular neighbourhood of the planter. This may be called a new doctrine, in a Treatise on Planting. It is so, we believe, and we wish to have it understood, that we address ourselves to the PRIVATE INTEREST, rather than to the public spirit, of our readers; and we appeal to every one, who has had extensive dealings with mankind, for the propriety of our conduct.

WE are well aware that, situated as this country appears to us to be at present, Planting ranks among the first of public virtues; nevertheless, we rather wish to hold out that *lasting fame*, which always falls to the share of the successful planter, and those *pecuniary advantages*, which must ever result from plantations, judiciously set about and attentively executed, as being motives of a more *practical* nature.

WE wish, in the first place, to do away a mistaken notion, that when once a piece of ground is set apart for a plantation, it becomes a dead weight upon the estate, or a blank in it, at least. Nothing can be less true; for plantations, entered upon with judgement, and carried on with spirit, accumulate in value, as money at interest upon interest. If an estate, after a plantation has been

made upon it, is not worth more, by the trouble and expence of making it, than it was before, the undertaking was either ill judged, or badly executed.

An Ozier bed rises to profit the second or third year, and a Coppice in fifteen or twenty; while an Oak may be a century before he reach the most profitable state: but do they not, in effect, all pay an annual income? Do not estates sell at a price proportioned to the value of the timber which is upon them? and does not this value increase annually? The sweets of a fall are well understood, and the nearer we approach to this, the more valuable are the trees to be fallen.

We have some knowledge of a Gentleman, now living, who, during his lifetime, has made plantations, which, in all probability, will be worth, to his son, as much as the rest of his estate; handsome as it is. Supposing that those plantations have been made fifty or sixty years, and that, in the course of twenty or thirty more, they will be worth 50,000l. may we not say that, at present, they are worth some twenty or thirty thousand? What an incitement to planting!

Every thing, however, depends upon management. It is not sticking in a thousand or ten thousand plants, as if for the sole purpose of saying

"I have done those things," without giving them a second thought, that will ever bring in the profits of planting; yet, how many Gentlemen do we see squandering their money, laying their lands waste, and rendering themselves ridiculous, by such management!

THE first PRECAUTION requisite to be taken, by a man who wishes to serve his family and his country, and, at the same time, to afford amusement and acquire credit to himself, by planting, is to consider well his own particular situation.

MUCH depends upon *soil*, and much on *locality*, or relative situation, with respect to water carriage, and a variety of other circumstances; as contiguity to a large town, or a manufacturing place, which generally enhances the value of land, and the price of labour.

MUCH, also, depends upon the *natural features*, or positive situation of his estate: the hang of a hill, which is too steep for the plow, and a swampy bottom, too rotten to bear pasturing stock, and which cannot be rendered firm enough for that purpose, but at too large an expence, may, in general, be highly improved, by planting*.

* The last, however, is a case that will now seldom occur, since the art of DRAINING is so well understood.

AGAIN, where the top soil, or culturable stratum, is of an unproductive nature, while a bed of clay, loam, or other good soil, lies under it, planting may sometimes be made greatly advantageous. An instance occurs, in the Vale of Gloucester, of a coppice which pays at the rate of fourteen or fifteen shillings an acre, annually; while the land, which surrounds it, is not worth more than eight or ten shillings. The soil is a *sour* clay, and the substratum a calcareous loam. The valuable plantations above-mentioned afford a similar instance; the top soil is a light unproductive sand, under which lies a thick stratum of strong clayey loam. Wherever we see the Hawthorn flourish upon *bad land*, we may venture to conclude, that, under ordinary circumstances, such land will pay for planting.

BUT, with respect to low lands, which wear a profitable sward, and will bear the tread of cattle, or which, by judicious draining, can be rendered such, at a reasonable expence; also to uplands, which, by proper management, will throw out profitable crops of corn, and other arable produce, more especially if the substratum is of a nature ungenial to the ligneous tribes: we are of opinion, that planting can seldom be carried on, upon a large scale, with propriety. Nevertheless, even under these circumstances, skreen plantations,

upon exposed heights, as well as sheltering Groves, and slips of planting, to fill up the inconvenient crookednesses of the borders of arable fields, may be productive of real and substantial improvement to an estate.

THE next step, which a Gentleman ought to take, before he set about raising plantations, upon a large scale, is to look round his neighbourhood, and make himself acquainted with its present state, as to woodlands; as well as with the comparative value which these bear to arable and grass lands. He must go still farther; he must learn the natural consumption of the country; not only of timber in general, but of the several species. Nor must he stop here; he must endeavour to pry into futurity, and form some judgement of the particular species, whether it be Oak, Ash, Elm, Beech, the Aquatics, Pines, or Coppice Woods, which will be wanted, at the time his plantations will arrive at maturity.

IT is possible, there may be situations, in this island, where, from a superabundance of Woodlands, it would be unprofitable to plant, even hangs, and bad top soils: it is not probable however, that any such places are to be found; for, in a country situated near water carriage, (and if the present spirit of cutting canals continue to

prevail, what part of this island will, a century hence, be out of the reach of water carriage?) ship timber will, in all human probability, always find a market; and, in situations remote from such cheap conveyance, foreign timber will always bear a price proportionably high; consequently, the timber raised, in such a country, will, in all probability, find a market in the neighbourhood of its growth.

BEFORE we begin to speak of the several species of Plantations or Woodlands, and the methods of raising them, it will be proper to ENUMERATE, here, the different SPECIES of TREES, which we conceive to be most eligible to be planted, for the purposes of timber and underwood, in this country.

UNDER the article CHOICE OF TIMBER TREES, it appears that

THE OAK,
THE ASH,
THE ELM, and
THE BEECH,

are the four principal *domestic* timbers, now in use, in this kingdom: To which must be added

THE PINE TRIBE, particularly
THE LARCH; and
THE AQUATICS;

as substitutes for *foreign* timber, at present imported, in vast quantities, into this island: And to those must be added, as *coppice woods;*

THE ASH,
THE CHESNUT,
THE HAZEL,
THE SALLOW,
THE WILD SORB, and
THE OZIER *.

THERE are four distinct SPECIES of WOODLANDS:

WOODS,
TIMBER GROVES,
COPPICES,
WOODED WASTES.

BY a *Wood* is meant a mixture of timber trees and underwood; by *Timber Grove*, a collection of timber trees only, placed in close order; by *Coppice*, stubwood alone, without an intermixture of timber trees; and by *Wooded Waste*, grass land over-run with rough woodiness; or a mixture of Woodland and grassy plots; which being thought an object of pasturage, the wood is kept under, by being browsed upon by stock, while the grass, in

* The mode of PROPAGATION, and the SOIL suitable to the several species, appear under their respective names, in the ALPHABET OF PLANTS.

its turn, is stinted by the roots of the trees, and rendered of an inferior quality, by the want of a free admission of sun and air.

In practice, these Wooded Wastes ought first to be taken under consideration; for while a Gentleman has an acre of such land upon his estate, he ought not (generally speaking) to think of setting about raising fresh plantations: for, if grassiness prevail, and the soil be unkind for Wood, let this be cleared away, and the whole be converted to pasture or arable. But if, on the contrary, woodiness prevails, fence out the stock, and fill up the vacancies, in the manner *hereafter* described: for, in a systematic Treatise on Planting, we think it most consistent with method, to treat of Woodlands in the order already set down.

SECTION THE FIRST.

WOODS.

OPEN Woods are adapted more particularly, to the purpose of raising TIMBER for SHIPBUILDING, and, perhaps, for some few other purposes,

where *crookedness* is required. Where a *straightness* and length of stem, and cleanness of grain, are wanted, CLOSE WOODS or GROVES are more eligible; and, where Stubwood is the principal object, COPPICES, unencumbered with timber trees, are most adviseable.

IT follows, that no timber tree whatever, but the Oak, can be raised, with propriety, in open Woods, and this, only, when a supply of ship timber is intended; consequently, open Woods are peculiarly adapted to places lying conveniently for water carriage, or which may, in all probability, lie convenient for water carriage, a century or two hence.

VARIOUS opinions prevail, with respect to the most eligible METHOD OF RAISING A WOOD: some are warm advocates for *sowing*, others for *planting*; some again are partial to *rows*, while others prefer the *irregular* culture.

THE dispute about sowing and planting may, in some measure, be reconciled in the following manner: Where the strength of the land lies in the substratum, while the surface soil is of an ungenial nature, *sow*, in order that the roots may strike deep, and thereby reap the full advantage of the treasures below: but, on the contrary,

where the top soil is good, and the bottom of an opposite quality, *plant*, and thereby give the roots the full enjoyment of the productive part of the soil; or, under these last circumstances, *sow*, and *tap* the young plants as they stand (with a tapping instrument), and thereby check their downward tendency, as well as strengthen their horizontal roots.

By *this* method of treating seedling plants, the chief advantage of planting is obtained. The dispute, therefore, seems to rest entirely upon this question: Which of the two methods is least expensive? To come at this, there are two things to be considered—the *actual expence* of labour and other contingent matters, and the *loss of time* in the land occupied. With respect to the former, sowing is beyond comparison the cheapest method; but, in regard to the latter, planting may seem to gain a preference; for the seed bed is small, compared with the ground to be planted, and while that is rearing the seedling plants, this continues to be applied to the purposes of husbandry. However, if we consider the check which plants in general receive in transplantation*, and if (as

* We have known an instance of transplanted Oaks remaining upon the ground so long as eight years before they began to move. And let us hear what MILLER says upon this subject; we have no reason to doubt his speaking from

we shall hereafter shew) the interspaces of an infant Wood may, for several years after sowing, be still cultivated to advantage, the preference, we conceive, is evidently, and beyond all dispute, on the side of sowing.

WITH respect to the arrangement of Wood Plants,—the preference to be given to the *row*, or the *random* culture—rests in some measure upon the nature and situation of the land to be stocked with plants. Against steep hangs, where the plow cannot be conveniently used in cleaning and cultivating the interspaces, during the infancy of the Wood, either method may be adopted; and if plants are to be put in the *quincunx* manner will

his own experience, though he does not particularize it.— "When Oak trees are cultivated with a view to profit, acorns should be sown, where the trees are designed to grow; for those which are transplanted will never arrive to the size of those which stand where they are sown, nor will they last near so long. For in some places where these high trees have been transplanted, with the greatest care, they have grown very fast for several years after, yet are now decaying, when those which remain in the places where they came up from the acorns are still very thriving, and have not the least sign of decay. Therefore, whoever designs to cultivate these trees for timber, should never think of transplanting them, but sow the acorns on the same ground where they are to grow; for timber of all those trees which are transplanted is not near so valuable as that of the trees from acorns." (Art. QUERCUS.)

be found preferable to any. But in more level situations, we cannot allow any liberty of choice: the *drill* manner is undoubtedly the most eligible; and, with this method of raising a Wood, we begin to give our directions.

LAYING OUT LANDS FOR WOODS. But before we enter upon the immediate subject, it will be proper to premise, that, previously to the commencement of any undertaking of this nature, it is adviseable that the spot or spots intended to be converted into Woodland, should be determined upon,—the quantity of land ascertained,—and the whole (whether it be entire or in detached parts, and whether it be ten acres or a hundred) divided into *annual sowings*.

THE exact number of these sowings should be regulated by the uses for which the Underwood is intended. Thus, if, as in Surrey, stakes, edders, and hoops are saleable, the suite ought to consist of eight or ten sowings; or if, as in Kent, hop poles are in demand, fourteen or fifteen sowings will be required; and if, as in Yorkshire, rails be wanted, or, as in Gloucestershire, cord-wood be most marketable, eighteen or twenty sowings will be necessary, to produce a regular succession of *annual falls*.

MANY advantages accrue from thus parcelling out the land into sowings: the business, by being divided, will be rendered less burdensome; a certain proportion being every year to be done, a regular set of hands will, in proper season, be employed; and, by beginning upon a small scale, the errors of the first year will be corrected in the practice of the second, and those of the second in that of the third. The produce of the intervals will fall into regular course; and, when the whole is completed, the falls will follow each other in regular succession.

IF it be found convenient to hasten the business, two or three divisions may be sown in one year, the separate falls being marked by the first cutting. This, though by no means equal to regular sowings, corresponding to the intended falls, is much better than hurrying over the whole business at once;—a piece of rashness, which no man, who works upon an extensive scale, should be guilty of.

THE principal objections to raising Woodlands, in this progressive manner, is the extra trouble in fencing. However, if the sowings lie detached from each other, the objection falls; if, on the contrary, they lie together, or in plots, let the entire plot be inclosed at once; and, if it contain a number of sowings, some subdivisions will be

necessary, and the annual sowings of these subdivisions may be fenced off with hurdles, or other temporary contrivance. If the adjoining land to be sown be kept under the plow, little temporary fencing will be wanted.

IT may be further necessary, before we enter upon the business of sowing, to give some directions as to FENCING; for, unless this be done effectually, that will be labour lost.

IN raising a Wood, from seeds, it is not only necessary to fence against cattle and sheep, but against hares also, especially if they are numerous. Nothing less than a close fence is adequate to this purpose. Where the soil will admit of it, a ditch, bank, and dwarf paling, may be raised, in the manner already described, under the article FENCES; except that, instead of a stake-and-edder hedge, a close paling should be set upon the bank, in the following manner.

BEFORE the bank be finished, the posts, about five feet long, should be put down, their lower ends being first *charred* (superficially burnt), to prevent their decaying. One rail is sufficient. To this the upper ends of the pales are nailed, their lower ends having been previously driven into the crown of the bank. The pales should be about

three feet long, and ought to be of Oak, or the bottom parts will soon decay.

THE fence is the stronger, and more effectual, if the ditch be made on the outer side of it, and the paling set so as to lean outwards; but the quick stands a much better chance of being reared on the inner side of the paling, next to the seedling plants: therefore, the the most prudent method of making a fence of this kind, is to make the ditch on the outside, without an off-set, leaning the paling over it, and planting the quick at the foot of the bank, on the inner side: it then becomes, what it ought always to be considered,—a part the *Nursery*.

THIS, however, is an expensive fence, and is better suited to a small than a large scale; and if, instead of the dwarf paling, a close rough stake-and-edder hedge be set upon the bank, it will (provided it be well made and carefully attended to from time to time, and the *muces*, if any be made, stopt with rough bushes, and stakes driven through them), continue to be effectual, against *hares*, for a considerable time. Against *rabbits*, nothing less than death is effectual.

AT length we come to treat particularly of the method of raising a Wood, upon land sufficiently

sound, and sufficiently level, to be cultivated, conveniently, with the COMMON PLOW.

THE PREPARATION OF THE GROUND. If the soil be of a stiff clayey nature, it should receive a whole year's fallow, as for wheat;—if light, a crop of turneps may be taken; at all events, it must be made perfectly clean, before the tree seeds be sown; particularly from perennial root weeds: for when once the seeds are sown, all further opportunity of performing *this* necessary business is, in a great measure, lost. If the situation be moist, the soil should be gathered into wide lands; not high, but sufficiently round to prevent surface water from lodging upon them.

THE TIME OF SOWING is either autumn or spring. October and November may be called the fittest months for the autumnal sowing, and March for the spring sowing. A man of judgement, however, will attend to the season, and to the state of his soil, rather than to the Calendar.

THE METHOD OF SOWING is this.—The land being in fine order, and the season favorable, the whole surface should be sown with Corn or Pulse, adapted to the season of sowing: if in autumn, Wheat or Rye may be chosen; in spring, Beans or Oats. Whichsoever of the species of Corn is

adopted, the quantity of seed should be less than usual, in order to give a free admission of air, and prevent the crop from lodging.

THE sowing of the grain being completed, that of the tree seeds must be immediately set about. These must be put in, in lines, or drills, *across* the lands, and in the manner best adapted to their respective natures: Acorns and Nuts should be dibbled in, while Keys and Berries should be scattered in trenches or drills, drawn with the corner of a hoe, in the manner in which garden peas are usually sown.

THE DISTANCE which we recommend to be observed, between the rows, is a quarter of a statute rod (four feet, and one and a half inch). This may, in theory, seem to be an unnecessary precision; but, in practice, there are many conveniencies accrue from it. In setting out the distance between the drills, a land-chain should be used, and not a line, which is subject to be shortened or lengthened by the weather. A chain is already divided into rods, and the quarters may be distinguished by white paint, or other obvious marks. Stakes being driven at the ends of the drills, a line is stretched, to dibble or draw the trenches by*.

* It may be unnecessary to observe, that the drills should be exactly perpendicular to the range of stakes, otherwise the

If the plot be extensive, *glades*, for the purpose of roads, should be left at convenient distances.

The species of underwood must be determined by the consumption, or demand, peculiar to the country in which it is intended to be raised. In Surrey, where stakes, edders, and hoops, are in demand, the Oak, the Hazel, the Sallow, and the Ash, are esteemed valuable, as underwoods. Upon the banks of the Wye, in Herefordshire, Monmouthshire, and Gloucestershire, where great quantities of charcoal are made for the iron forges, Beech is the prevailing underwood; but whether from choice, or from its thriving naturally upon those bleak mountains, we cannot say. In Kent, where hop poles are valuable articles, the Chesnut and the Ash are the favourite Coppice woods. The Oak, the Ash, the Chesnut, the Beech, the Birch, the Wild Sorb, the Hazel, the Box, may have their peculiar excellencies, in different countries; and the choice is, of course, left to the person who has the care of the undertaking.

The species of timber has been already determined upon; the *Oak* being the only tree admis-

measurement will be false. If the sowings or quarters could be so laid out, that the drills may be of some determinate length, as twenty rods for instance, the business of measuring would be rendered still more easy.

sible in a *Wood*. The usual space allowed to timber trees, standing among underwood, is thirty feet: two rods (thirty-three feet) will not be found, when the trees have fully formed their heads, too wide a space. Therefore, every eighth drill, at least, should be sown with acorns, dibbled in, about six inches asunder*.

THE Oak and the Hazel, rising the FIRST YEAR after sowing, their respective drills will be sufficiently discriminable, at harvest; but the keys of the Ash lie two, and sometimes three, years in the ground, before they vegetate; and it will be convenient to have some distinguishing mark, in the stubble; in order to prevent their being disturbed in plowing the intervals, after harvest. To this end, if beans be the fostering crop, scatter a few Oats among the keys, the stubble of which will shew itself plainly, among that of the Beans; and, on the contrary, if Oats be the crop, a line of Bean stubble will have the same beneficial effect.

AT harvest, the crop should be reaped, not mown, and be carried of with all convenient care. Between harvest and winter, a pair of furrows should be laid back to back, in the middle of each

* For the particulars respecting the propagation of the several species under consideration, see their respective genera in the ALPHABET OF PLANTS.

interval, for the purposes of meliorating the soil for the next year's crop, and of laying the seedling plants dry;—while the stubble of the unplowed ground, on each side of the drills, will keep them warm during winter.

THE NEXT YEAR'S crop may be Potatoes, Cabbages, Turneps; or, if the first was Corn, this may be Beans; or, if Beans, Wheat drilled in the Tullian manner*.

ALL that the tree drills will require, this year, will be to be kept perfectly clean, by weeding and hand hoing.

IN the spring of the THIRD YEAR, the drills which rose the first year should be looked over, and the *vacancies filled up*, from the parts where the plants are superfluous: but those of the Ash should be deferred until the fourth year.

THE whole should afterwards be looked over, from time to time; and this, with cultivating the

* This species of culture, however, can only be practised in the plots and skreen plantations, which are mentioned in page 116: it being there determined, that lands productive of CORN and GRASS, and lying conveniently for CULTIVATION, can seldom be converted to WOODLAND,—merely as such, and on a large scale,—with propriety.

intervals, and keeping the drills free from weeds, will be all that will be necessary, until the tops of the plants begin to interfere.

HOWEVER, if seedlings be wanted for the purpose of laying into hedges, or if transplanted plants be saleable in the country, the *superfluous seedlings* may be drawn out of the drills, in the spring of the third or fourth year, and transplanted into a vacant ground.

NONE can be more proper, nor any so convenient, as the contiguous *intervals*, in which they may remain two or three years, without injury to the drills, and may afford a profitable crop; subject, however, to this disadvantage, the spade must be made use of, instead of the plow, in cleaning the interspaces. Nevertheless, a stock of plants of this kind are valuable, not only as articles of sale, but for shelter plantations, and for filling up waste corners of an estate. See p. 117.

THE FIRST CUTTING should be timed by the plants themselves. Whenever the rows of Oaks, intended for timbers, are in danger of being drawn up too slender for their height, by reason of their being too much crowded, by the interference of the rows, the whole must be cut down, to within a hand breadth of the ground; except the Oaks

intended for stands, which should now be set out, at about two rods distance from each other, and as nearly a quincunx, as plants most proper for the purpose will allow.

STRENGTH, cleanness, and upward tendency, are the criterions by which the choice of these ought to be determined upon. If more than one plant of this description stand near the point desired, it is adviseable not to take them down, the first fall (provided they do not interfere too closely with each other), but to let them remain, in order to guard against accidents, and to afford a future opportunity of making a second choice, when the plants are arrived at a more advanced state.

THE young stands will require to be more or less *pruned:* their leaders must be particularly attended to, the lower side shoots taken off, and their heads reduced, in such a manner, as to prevent their being rendered top-heavy.

HOWEVER, if the first fall of underwood be made in due time, their heads, in general, will want but little pruning; for it is not in this case, as in that of transplanting, where the roots have fresh shoots to make, and a fresh source of food to seek: here, they are fully prepared to send up the necessary supplies, and the more top there is to promote the

ascent, the quicker progress the plants will be enabled to make.

IT is, therefore, very imprudent to defer the first fall, until the plants be drawn up, too slender, to bear a well sized top: We have known young Oaklings, raised in a manner similar to that which is here described, drawn up so tall and slender, by injudicious treatment, as not to be able to bear the smallest top, without stooping under the weight of their own leaves; a shower of snow, falling without wind, bows them to the ground.

THE SECOND FALL should be timed according to the *ware* which the country calls for; with this proviso, however, that the timber stands be not injured, by being crowded among the underwood; for, rather than this should be the case, the second fall should take place, although the Coppice wood may not have reached the most profitable state.

AFTER the second and every SUCCEEDING FALL of underwood, the timbers should be gone over, their leaders kept single, and their heads set up, until the stems have reached the height of fifteen or twenty feet (more or less, as accidents, or their respective tendencies, may happen to determine),

when their heads should be permitted to spread, and take their own natural form.

So soon as the branches are firmly established (which may happen in ten, fifteen, or twenty years from the last pruning, sooner or later, according to the soil, situation, and other circumstances), THE HEADS SHOULD BE PRUNED.

In doing this, the leader is to be shortened, to check the upward growth of the tree, and the main strength of the head to be thrown, as much as may be, into one principal arm; in order to obtain, with greater certainty, the important end to which *Wood* timber is more peculiarly applicable: we mean CROOKED SHIP TIMBER.

NEXT, as to RAISING A WOOD AGAINST A HANG, too steep to be cultivated conveniently with the *common plow*, after the Wood seeds are sown; but which may, nevertheless, be fallowed, and brought into proper tilth by the *turn-wrest plow*; namely, a plow which turns the furrows all one way, and which is in common use upon the hills of Kent and Surrey.

UNDER these circumstances, the planter has it in choice, whether he will sow seeds,—or put in seedlings,—or transplanted plants. If he adopt the

first, the expence of cleaning, by hand, will fall heavy; and if the last, the labour of the Nursery will not be less burdensome. The middle path is therefore most adviseable.

THE seedling plants may, in general, be permitted to remain, until the third year, in the seed bed; by which time they will have acquired sufficient strength and stature, to struggle with the lower order of weeds, while those of a more aspiring nature may be kept under, at a reasonable expence.

THE arrangement of these plants may either be irregular, or in drills, similar to those mentioned aforegoing. After the plants are in, acorns may be dibbled in the interspaces, that success may be rendered the more secure.

THE choice of underwood, and the after management, under these circumstances, must be subject to the same rules, as under those already mentioned.

WITH respect to HANGS SO VERY STEEP, OR SO STONEY, that even the turn-wrest plow cannot be used in preparing the soil, seedling plants and acorns, or other tree seeds, may be put in, without any previous preparations; except that of

clearing away bushes, and burning off the weeds and rough grass, with which the surface may be encumbered. In this case, the number of plants, and the quantity of acorns, should be greater, than when the ground has been prepared by a fallow.

SINCE the foregoing Remarks were written (in 1783 and 4), some favorable opportunities of collecting FARTHER INFORMATION, respecting this very important branch of Rural Economy, have occurred to us.

IN the SOUTHERN COUNTIES, we have seen the Oak rise fortuitously, or with but little assistance of the Woodman, to Timber of the first quality*. In the MIDLAND COUNTIES, we have examined Oak Woods, of different ages, which have been propagated by art, in the most simple manner: namely, that of sowing acorns with arable crops, or of setting them in the turf of grassland, and leaving the young plants to nature; and this with good success†. In the HIGHLANDS of SCOTLAND, we have observed districts of mountain surfaces

* For a digested Account of the management of Woods, in the Weald of Sussex, see SOUTHERN COUNTIES: Sect: WOODLANDS, WEALD OF SUSSEX.

† See the RURAL ECONOMY of the MIDLAND COUNTIES, Vol. ii. p. 297.

covered with tree plants, of various ages and species; and this, too, with a success, which, seeing the inaccurate manner in which they are frequently put in, and the neglect they afterward experience, is almost incredible*.

NEVERTHELESS, we still remain advocates for the practice of TREATING YOUNG WOODS AS NURSERY GROUNDS. Our motives are many: by keeping the soil in a state of tilth, and free from weeds, much time is gained in their early growth, and a strong vigorous habit given to the youthful plants: by this treatment, also, a favorable opportunity is obtained, for removing supernumerary plants, for sale, or for plots of planting, or for filling up vacancies, in parts too thinly stocked.

WE likewise retain full conviction of the propriety of TRAINING THE YOUNG TIMBER TREES OF WOODS, in such manner as to render them, *with certainty*, applicable to the especial purposes for which they are raised, rather than to leave them to *fortuitous circumstances*; and suffer them, by spreading too low, to destroy the underwood which surrounds them, or, by shooting up too

* See a Sketch of the RURAL ECONOMY of the CENTRAL HIGHLANDS, presented, as a REPORT of that District, to the BOARD OF AGRICULTURE, in Feb. 1794.

straight to frustrate the main intention of wood timber. If straight timber be required, CLOSE GROVES, and not OPEN WOODS, are the fit places to raise it in. Land, such at least as will grow ship timber with advantage, is become too valuable to be given up, in any case, to accident or neglect.

IN Forests and other *Wastes*, whether public or appropriated, especially where the soil is of a deep clayey nature, Oaks will rise, spontaneously, from seeds that *happen* to be dropped, and whose seedling plants *happen* to be defended, by underwood or rough bushes, from the bite of pasturing animals; and some few of the plants, thus fortuitously raised, may *chance* to take the form desired by the ship carpenter; but this is all mere matter of *accident*. Even in kept woods, there may not, under the much praised system of neglect, be a sufficient crook, or a knee, fit for a first rate ship, in an acre of Woodland.

WE have repeatedly spoken our sentiments on the subject of PRUNING TIMBER TREES. To hack off a *large bough* from an *aged tree*, is a crime of the deepest dye, in the management of timber. But what relation has this mad act to the salutary operation of removing a twig from the stem of a young growing tree, or of pruning the boughs, or even of removing the leader (far above the stem),

of a tree in a youthful growing state? The operations are as distinct as darkness and light, or as evil and good. In that case, the size of the wound, and the exhausted state of the tree, unite to prevent the healing; and a defect in the timber consequently takes place: while, in this, the wound is inconsiderable, and the vigorous state of the tree enables it to cicatrize the sore, in a few months, perhaps, after the operation is performed.

BY freeing the stems of young trees from side shoots, and by keeping their leaders single, a LENGTH OF STEM is, *with certainty*, obtained; and, by afterwards checking their upright growth, and throwing the main strength of the head into one principal bough (by checking, not removing, the rest), a CROOKEDNESS of Timber is had, with the same certainty: and, what is equally necessary in SHIP TIMBER, a CLEANNESS and EVENNESS of CONTEXTURE are, at the same time, produced. The dangerous, and too often, it is to be feared, fatal defect, caused by the decayed stumps of dead stem-boughs being overgrown and hid under a shell of sound timber,—a defect which every fortuitous tree is liable to,—is, by this provident treatment avoided: the timber, from the pith to the sap, becoming uniformly sound, and of equal strength and durability.

NOTHING but prejudice, of the most inveterate kind, can reject a practice, which is founded on the most obvious principles of nature and reason; and which, in the numerous instances we have seen in hedge timber, and more particularly in the ancient avenues, which remain in every quarter of the kingdom, and which, beyond all doubt, were trained up in the manner here recommended (for without it their uniform length of stem could not have been had), are sufficient proofs of its eligibility*.

UNDER a full conviction of the propriety of training up young trees, in the way best adapted to the purposes for which they are severally intended, whether it be that of a wall tree, or an espalier, an orchard tree for fruit, or a wood tree for ship timber, we do not hesitate to recommend

* The mischiefs done to Hedgerow and Avenue Trees, by injudicious *lopping*—a disgraceful treatment of Timber Trees everywhere observable,—have arisen from the practice we are condemning; namely, that of taking large boughs from the stems of aged Trees,—these mischiefs having been committed *after the trees were grown up*;—and not from the practice we are strenuously recommending; namely, that of training young trees, *during the early stages of their growth*.

For other remarks on the PRUNING of TIMBER TREES,—see the Article HEDGEROWS, in page 102 of this Volume.

Also the RURAL ECONOMY of the MIDLAND COUNTIES, Vol. ii. p. 337.

it, in the strongest terms, to every owner and manager of trees.

IN our judgement, the Royal Forests may not claim the merit of rational management, until men, expert in the training of timber trees for the purpose of building ships of war, be constantly employed in this important part of the managment of National Timber*.

EVEN the LARCH, it is more than probable, may be TRAINED, with great advantage, as SHIP TIMBER; for which it is well understood to be superiorly adapted. In Italy, we believe, it has been applied to that purpose, for ages past. In the grounds of DUNKELD, a seat of the DUKE OF ATHOL, in Perthshire, there are Larches, of considerable size, in a good form for Ship Building. Many have a CROOKEDNESS OF STEM, adapted to ribs; and one, in particular, we observed with a FORKED TOP, admirably suited to knees. The former appeared to have arisen from the stems having, while young, been in a stooping posture; and the other, from the tree having lost its head, and two opposite side boughs having taken the

* We are happy to find, since writing the above, that the SOCIETY of ARTS, in London, have, at length, taken up this subject. October 1795.

office of leaders*: fortuitous incidents, which art could readily copy; and, we believe, with high advantage to this island. For, should the present price of bark continue, a supply of OAK TIMBER, for the purpose of building large Ships, will, it is to be feared, be greatly lessened, if not, in some measure, cut off: a circumstance, however, which will be the less regretted, by the *agricultural* interest, as the LARCH will flourish abundantly, on lands that are in a manner useless to agriculture; while the OAK, to bring it to a stature sufficient for the purpose of constructing ships of magnitude, requires a soil and situation which may generally be applied to the uses of husbandry.

HAPPY, therefore, is it for this island, to possess two trees, opposite in their natures, yet equally perhaps capable of affording protection to its political independence: and towards securing so valuable a blessing, both of them ought to be reared and TRAINED with unremitting solicitude.

SEE more of the LARCH, in the next SECTION.

* It is observable of this Tree, that it bears cropping, even by cattle, with singular patience; seldom failing to renew its upward course, by one or more fresh leaders.

SECTION THE SECOND.

GROVES.

THE TIMBER GROVE is the prevailing *plantation* of modern time. WOODS OR COPPICES are seldom attempted: indeed, until of late years, clumps of Scotch Firs seem to have engaged, in a great measure, the attention of the planter.

THE SCOTCH FIR, however, is one of the last trees that ought to engage the attention of the British planter; and should be invariably excluded from every soil and situation, in which any other timber tree can be made to flourish. The North aspect of bleak and barren heights is the only situation in which it ought to be tolerated; and even there, the Larch is found to outbrave it. In better soils, and milder situation, the wood of the Scotch Fir is worth little, and its growth so licentious, as to over-run every thing which grows in its immediate neighbourhood: this renders it wholly unfit to be associated with other timber trees: we

therefore, now discard it entirely from USEFUL PLANTATIONS*.

THE SPECIES OF TIMBER TREES, which we beg leave to recommend to the planter's notice, have been already mentioned, at the opening of this Chapter: They consist of

THE OAK,
THE ASH,
THE ELM,
THE BEECH,
THE LARCH, and
THE AQUATICS.

OF the tribe last mentioned, we chiefly recommend

THE POPLAR,
THE WILLOW,
THE ALDER,
THE OZIER.

To this list may be added,

THE CHESNUT,
THE WALNUT,
THE CHERRY,

* Nevertheless, to give variety in ornamental scenery, and as a nurse plant (if kept under due restraint), the Scotch Fir may be retained.

as substitutes for the Oak and the Beech; and the two latter, as humble representatives of the princely Mahogany.

RESPECTING the *Elm*, an error prevails: MILLER and HANBURY tell us (speaking more particularly of the fine-leaved sort), that it will not flourish in close plantations. Experience, however, leads us to be of a contrary opinion. How often do we see two Elms, standing so close together, that a bird could not fly through between them, yet both of them equally well stemmed: indeed, the shoots of the Elm will interweave with each other, in a manner we seldom see in any other species of tree. In groups and close groves, too, we have seen them thrive abundantly. It is observable, however, that in these situations, their stems running up clean, and in a great measure free from side shoots, the timber takes a different nature, from that which is raised in more exposed places;—where the lateral shoots being numerous, and being lopped off, from time to time, the stems become knotty; by which means the natural tenacity, in which the peculiar excellency of the timber of the Elm consists, is considerably increased.

IN a Grove, the *Ash* may be termed an *outside* tree; plow beams, shafts, fellies, and harrow bulls, requiring a curvature, which generally takes place

in the outer rows of a close plantation. The Ash, however, must not be excluded a central situation, as a straightness of grain is frequently desirable.

THE *Oak* and the *Larch* (except for the purpose of SHIP TIMBER, &c.) the *Beech* and the *Chesnut*, are *inside* trees; the carpenter, the cooper, and the turner, requiring a cleanness of grain.

WITH respect to SOIL AND SITUATION, the Elm, the Chesnut, the Walnut, and the Cherry, require a good soil and mild situation; the Aquatics should be confined to moist low grounds; and the Beech and the Larch to bleak or barren places; whilst the Oak and the Ash can accommodate themselves to almost any soil or situation; though they seldom rise to profit, on bleak and barren sites.

WE now come to the METHOD OF RAISING the several species of Grove timbers. The Oak, the Ash, the coarse-leaved Elm, the Beech, the Chesnut, the Walnut, and the Cherry, may be raised in drills, in the manner described in the preceding section, without any variation, except in the method of training. The Pines being of a hazardous nature, when in their infant state, it is adviseable to raise them in seed beds, and plant them out as seedling plants. The fine-leaved Elm must

be raised from layers; and the Aquatics from cuttings*.

THE METHOD OF TRAINING Grove timbers, raised in drills, is this: If seedling plants be wanted, the rows may thinned, the third and fourth years, until the remaining plants stand from twelve to eighteen inches apart. This done, nothing more will be requisite, until such time as some kind of *ware* can be cut out; as edders, hoops, stakes, &c.

THE plants having reached this stage of their growth, the rows should be gone over, every winter, and all the underling plants be cut out, beneath the surface of the ground, which will, in general, kill the roots and save the expence of grubbing. If the remaining plants are not already too much crouded, those which yet struggle for the light ought to be left, to assist in drawing up, with greater certainty, those which have gained the ascendancy.

THIS conduct should be observed, from the time of the first cutting, until the trees are set out, at distances best suited to their respective natures, and according to the accidental tendency, which

* For the method of *planting* a Timber Grove, see the Division MANUAL LABOUR, page 33.

they happened to take, in rising. For, in *thinning* a timber grove, little or no regard must be had to a regularity of distance at the root; an equal distribution of head room meriting a more particular attention.

THE selection ought to be directed by the strength of the plants, and the uniformity of the CANOPY, taken jointly: for a chasm in what may be called the foliage of a grove, is similar to a vacancy in a coppice, or an unproductive plot in a field of corn. The leaves are as labourers; and every leaf deficient is a labourer lost. The woodman's eye ought, therefore, to be directed towards the tops, rather than to the roots, of his trees.

THERE are other things observable in *thinning* a grove. If it be thinned too fast, its upward growth will be checked, and the length of stem curtailed; and if, on the other hand, the thinning be neglected, or be performed too leisurely, the plants, especially in their taller state, will be rendered too slender, and thereby become liable to lash each other's tops, with every blast of wind. This evil is called *whipping of tops*, and many fine groves have been very materially injured by it. Whenever two trees are seen to be engaged in this conflict, one of them should be taken down without

loss of time; otherwise, it will probably prove fatal to them both.

IF the thinning be conducted with judgement, little *pruning* will be necessary; some, however, will be found requisite: strong master plants are liable to throw out side branches, to the annoyance of their neighbours: those should be taken off, in time, and all dead branches should be removed, especially those of the pine tribe; otherwise, the heart of the timber will be rendered coarse, knotty, and of a bad quality. The leaders should also have due attention paid to them; particularly if a group of foul-headed plants happen to fall together; for, in this case, if nature be not assisted, a timber tree will, in the end, be wanted.

THIS method of training holds good, whether the grove be raised from seeds, immediately, or from seedling, or other plants; and whether these be arranged in drills, or in the promiscuous manner; provided the body of the grove be formed of one entire species of timber tree; for of the method of raising that species of grove we have hitherto been treating.

WITH regard to MISCELLANEOUS GROVES, we have seen so many evil effects, arising from injudicious mixtures of timber trees, that we are

inclined to condemn, *as unprofitable*, all mixtures whatever. It may be argued, however, that, by associating trees of different natures, the soil will be made the most of; under an idea, that each species of plant has its own favourite food: and, indeed, it is well known that corn flourishes after grass, and grass after corn; that the Ash will thrive after the Oak, and the Oak after the Ash, in a more profitable manner, than any one of these plants would do, if propagated repeatedly upon the same spot of soil.

THIS leads to an improvement in the method of RAISING A GROVE OF OAKS; and the same method is applicable to any other species of tree. Instead of sowing every drill with acorns, let every second be sown with the seeds of a tree of a different nature; and, under ordinary circumstances, with those of the Ash: its seeds are easily procured, and, as underwood, no tree is applicable to so many useful purposes.

IN this case, the method of training is nearly the same, as that already described; except that, throughout, the Ash must be made subservient to the Oak: if it rise too fast, it must be cut down to the stub, as underwood; if ashen stands be left to draw up the young Oaks, they must be lopt, or taken down, the moment they aspire to a

superiority, or give the neighbouring plants an improper tendency.

WHEN the Oaks have acquired a sufficient length of stem, and have made good their canopy, the assistance of the Ashes will be no longer wanted; nor will they be any longer valuable as underwood; they ought therefore to be entirely removed: and, if their roots be grubbed up, the Oaks will receive at once a fresh supply of air and pasturage.

IN bleak situations, a quicker growing and better feathered plant than the Ash, affords more valuable protection: the Scotch Fir, kept under due subjection, is eligible in this case. The Furze is sometimes made use of, for this purpose: but the plant which we wish to recommend, in preference to the last, is the Broom; as being less offensive, and at the same time more efficacious. It's seeds are readily procured; its growth is rapid; it will brave the bleakest aspect; and the natural softness of its foliage renders it inoffensive to work among, even in its tallest and most crowded state.

THE DUKE of PORTLAND has found, that upon the bleak sandy swells of Nottingham Forest, the Birch affords a friendly protection to the Oak:

and, when we consider the easy manner in which this plant may be raised, the quickness of its growth, the shelter it gives, and its value, in many places, as an underwood, we must allow great merit in the choice.

HIS Grace's plantations being carried on upon a scale which is truly magnificent, and it being in the conducting of great undertakings, that the human invention is raised to the highest pitch, it would be unpardonable, in a work of this nature, to omit inserting the following Letter from Mr. SPEECHLY, his Grace's Gardner, to Dr. HUNTER, Editor of a late edition of EVELYN'S *Sylva*, describing the manner in which these plantations have been conducted.

WE introduce it, in this place, as the style of planting it describes is peculiarly adapted to raising GROVES against HANGS, or acclivities of hills. The candour contained in the Letter itself precludes the necessity of apprizing our readers, that it is not calculated for a STRONG LEVEL COUNTRY, nor for raising Woods, in any soil or situation.

——' Few Noblemen plant more than his ' Grace the Duke of Portland; and I think I may ' say, without vanity, none with greater success. ' But as no man should think of planting in the

'very extensive manner that we do, before he is
'provided with well stocked nurseries, it may not
'be amiss, before I proceed further, to give a short
'sketch of that necessary business, as also to in-
'form you of the soil and situation of our seat
'of planting. The greatest part of our plantation
'is on that soil which in Nottinghamshire is
'generally distinguished by the name of Forest
'land. It is a continuation of hills and dales; in
'some places the hills are very steep and high;
'but in general the ascents are gentle and easy.

'THE soil is composed of a mixture of sand and
'gravel; the hills abound most with the latter,
'and the vallies with the former, as the smaller
'particles are by the wind and rains brought,
'from time to time, from the high grounds to the
'lower. It is on the hilly grounds we make our
'plantations, which in time will make the vallies
'of much greater value, on account of the shelter
'they will afford.

"'AFTER his Grace has fixed on such a part of
'this Forest land as he intends to have planted,
'some well situated valley is chosen (as near the
'center of the intended plantations as may be) for
'the purpose of a nursery; if this valley is sur-
'rounded with hills on all sides but the south, so
'much the better. After having allotted a piece

'of ground, consisting of as many acres as is con-
'venient for the purpose, it is fenced about in such
'a manner as to keep out all obnoxious animals.
'At either end of the nursery are large boarded
'gates, as also a walk down the middle, wide
'enough to admit carriages to go through, which
'we find exceedingly convenient when we remove
'the young trees from thence to the plantations.
'After the fence is completed, the whole is
'trenched (except the walk in the middle) about
'twenty inches deep, which work may be done
'for about three pounds ten shillings, or four
'pounds, per acre, according as the land is more
'or less gravelly; this work is best done in the
'spring, when the planting season is over. If,
'after the trenching, two or three chaldrons of
'lime be laid on an acre, the land will produce
'an excellent crop either of cabbages or turneps,
'which being eaten off by sheep in the autumn,
'will make the land in fine order for all sorts of
'tree seeds: but as the Oak is the sort of tree we
'cultivate in general, I shall confine myself par-
'ticularly to our present method of raising and
'managing that most valuable species. In the
'autumn, after the cabbage or turneps are eaten
'off, the ground will require nothing more than
'a common digging. So soon as the acorns fall,
'after being provided with a good quantity, we
'sow them in the following manner: Draw drills

'with a hoe in the same manner as is practised 'for pease, and sow the acorns therein so thick as 'nearly to touch each other, and leave the space of 'one foot between row and row, and between every 'fifth row leave the space of two feet for the alleys. 'While the acorns are in the ground, great care 'must be taken to keep them from vermin, which 'would very often make great havock among the 'beds, if not timely prevented. Let this caution 'serve for most other sorts of tree seeds.

'AFTER the acorns are come up, the beds will 'require only to be kept clean from weeds until 'they want thinning; and as the plants frequently 'grow more in one wet season, where the soil 'is tolerably good, than in two dry ones, where 'the soil is but indifferent, the time for doing this 'is best ascertained by observing when the tops 'of the rows meet. Our rule is to thin them 'then, which we do by taking away one row on 'each side the middlemost, which leaves the re-'maining three rows the same distance apart as 'the breadth of the alleys. In taking up these 'rows, we ought to be anxiously careful neither 'to injure the roots of the plants removed, nor 'of those left on each side. The rest of the 'young Oaks being now left in rows at two feet 'apart, we let them again stand until their tops 'meet; then take up every other row, and leave

'the rest in rows four feet asunder, until they 'arrive to the height of about five feet, which 'is full as large a size as we ever wish to plant. In 'taking up the two last sizes, our method is to dig 'a trench at the end of each row full two feet deep, 'then undermine the plants, and let them fall 'into the trench with their roots entire.

'AND here let me observe, that much, very 'much, of their future success, depends on this 'point of their being well taken up. I declare 'that I should form greater hopes from one hun-'dred plants well taken up and planted, than from 'ten times that number taken up and planted in 'a random manner; besides, the loss of the plants 'makes the worst method the most expensive.

'BUT before I leave this account of our method 'of raising Oaks, I shall just beg leave to observe, 'that we are not very particular in the choice of 'acorns; in my own opinion, it matters not from 'what tree the acorns are gathered, provided they 'are good; for although there seems to be a 'variety of the English Oak, in respect to the form 'of the leaf and fruit, also their coming into leaf 'at different seasons, with some other marks of 'distinction, yet I am of opinion that they will 'all make good timber trees if properly managed. 'It is natural to suppose, that a tree will grow low

'and spreading in a hedge row; on the contrary, 'it is very improbable that many should grow 'so in a thick wood, where, in general, they draw 'one another up straight and tall. And I have 'observed, that the same distinctions hold good 'amongst our large timber trees in the woods, as 'in the low-spreading Oaks in the hedge rows.

'Though I have not, as yet, taken notice of any 'other sort of tree but the Oak, yet we have a 'great regard for, and raise great quantities of, 'Beech, Larch, Spanish Chesnut, Weymouth 'Pine, and all sorts of Firs, the Scotch excepted, 'as well as many other kinds, by way of thick-'ening the plantations while young; among which 'the Birch has hitherto been in the greatest esti-'mation, it being a quick growing tree, and taking 'the lead of most other sorts on our poor forest 'hills; and as we have an inexhaustible spring of 'them in the woods, where they rise of themselves 'in abundance from seed, we at all times plant 'them plentifully of different sizes. As to the 'Elm and Ash, we plant but few of them on the 'Forest, though we raise great quantitses of both, 'but particularly the Ash, which being an useful 'wood (but a bad neighbour among the Oaks), 'we plant in places apart by itself. I shall dismiss 'this subject concerning the management of our 'nurseries, after saying a word or two relating to

'pruning: we go over the whole of the young 'trees in the nursery every winter; but in this we 'do little more than shorten the strong side shoots, 'and take off one of all such as have double leads.

'HAVING thus pointed out the mode of forming 'and managing our nurseries, I shall now proceed 'to the plantations. The size of the plantations, 'at first beginning, must be in proportion to the 'stock of young trees in the nursery; for to under-'take to plant more ground than we have young 'trees to go through with for thick plantations, 'would turn to poor account on our forest hills. 'We always plant thick, as well as sow plenti-'fully at the same time, provided it be a season in 'which acorns can be had; so that all our plan-'tations answer in a few years as nurseries to 'succeeding plantations.

'As to the form of the plantations, they are 'very irregular; we sometimes follow a chain of 'hills to a very great distance; so that what we 'plant in one season, which perhaps is sixty, 'eighty, and sometimes an hundred acres, is no 'more than a part of one great design.

'IF the ground intended to be planted has not 'already been got into order for that purpose, it 'should be fenced about at least a twelvemonth

‘ before it is wanted to plant on, and immediately ‘ got into order for a crop of turnips; two chal-‘ drons of lime being laid on an acre will be of ‘ great service, as it will not only be a means of ‘ procuring a better crop of turnips, but will bind ‘ the land afterwards, and make it fall heavy, ‘ which is of great use when it comes to be ‘ planted, as some of the forest land is so exceed-‘ ingly light as to be liable to be blown from the ‘ roots of the young trees after planting: therefore ‘ we find it to be in the best order for planting ‘ about two years after it has been plowed up ‘ from pasture, before the turf is too far gone to a ‘ state of decay. It will be necessary to have a part ‘ of the turnips eaten off soon in the autumn, in ‘ order to get the ground into readiness for early ‘ planting; for we find the forward planting gene-‘ rally succeeds the best.

‘ AFTER the turnips are eaten off, we plow the ‘ ground with a double-furrow trenching plow ‘ made for that purpose, which, drawn by six ‘ horses, turns up the ground completely to the ‘ depth of twelve or thirteen inches: this deep ‘ plowing is of great service to the plants at the ‘ first, and also saves a great deal of trouble in ‘ making the holes. After the plowing is finished, ‘ we divide the ground into quarters for the plant-‘ ing by ridings. It will be a difficult matter to

'describe the laying out the ground for this pur-'pose, especially where there is such a variety of 'land as we have on the forest; much depends on 'the taste of the person employed in this office. 'Between the hills, towards the outsides of the 'plantations, we frequently leave the ridings from 'sixty to an hundred yards in breadth, and con-'tract them towards the middle of the woods, to 'the breadth of ten or twelve yards; and on the 'tops of the hills where there are plains, we 'frequently leave lawns of an acre or two, which 'makes a pleasing variety.

'IN some of them we plant the Cedar of Liba-'nus at good distances, so as to form irregular 'groves; and this sort of tree seems to thrive to 'admiration on the forest-land. On the outsides 'of the woods, next to the ridings, we plant Ever-'greens, as Hollies, Laurels, Yews, Junipers, &c. 'and these we dispose of in patches, sometimes 'the several sorts intire, at other times we inter-'mix them for variety; but not so as to make a 'regular screen or edging. Our design in the 'distribution of these plants, is to make the out-'sides of the woods appear as if scalloped with 'Evergreens intermixed sometimes with rare 'trees, as the *Liriondendron Tulipifera*, or Vir-'ginian Tulip-tree, &c.

'AFTER the ground is laid out into quarters 'for planting, we assign certain parts to Beech, 'Larch, Spanish Chesnuts, &c. These we plant 'in irregular patches here and there, throughout 'the plantations, which, when the trees are in 'leaf, has the most pleasing effect, on account of 'the diversity of shades; especially in such parts 'of the forest where four, five, and sometimes 'more of the large hill-points meet in the same 'valley, and tend, as it were, to the same center.

'AFTER those patches are planted, or marked 'out for that purpose, we then proceed to the 'planting in general. We always begin with 'planting the largest young trees of every sort, 'and end our work with those of the smallest 'size: were we to proceed otherwise, the making a 'hole for a larger sized tree, after the small ones 'are thick planted, would cause the greatest con-'fusion.

'BIRCH is generally the sort of tree we make 'our beginning with, which we find will bear to 'be removed with great safety, at the height of six 'or seven feet, though we commonly plant rather 'under than at that size. This sort of tree we 'are always supplied with from our plantations 'of five or six years growth. But before I proceed 'to the taking them up, it will be proper to

'inform you, that in the planting season we 'divide our hands into four classes, which we 'term Takers-up, Pruners, Carriers, and Plant-'ers: and here I shall describe the several methods 'of doing this work.

'FIRST, in taking up we have the same care to 'take up with good roots in the plantations, as was 'recommended in the nursery, though we cannot 'pursue the same method; but in both places, so 'soon as the plants are taken up we bed them in 'the ground in the following manner: Dig a trench 'at least fifteen inches deep, and set the young 'trees therein with their tops aslant, covering the 'roots well as we go along, and almost half way 'up the stem of the plants, with the earth that 'comes out of a second trench, which we fill in the 'like manner, and so proceed on till we have a 'load more or les in a heap, as may be convenient 'to the place from whence they were taken. In 'our light soil this trouble is but little, and we 'always have our plants secure, both from their 'roots drying, and their suffering by frost. We 'have a low-wheeled waggon to carry them from 'the heaps, where they are bedded, to the pruners, 'and generally take two loads every other day. 'When they arrive, the planters, pruners, &c. all 'assist to bed them there, in the same manner as 'before described. We have a portable shed for

'the pruners to work under, which is also con-'venient for the rest of the work-people to take 'shelter under in stormy weather. From the 'above heaps the plants are taken only so fast as 'they are wanted for pruning, which work we 'thus perform: Cut off all the branches close to 'the stem to about half the height of the plant, 'shortening the rest of the top to a conical form in 'proportion to the size of the plant; and in prun-'ing of the roots, we only cut off the extreme parts 'that have been bruised by the taking up, or such 'as have been damaged by accident, wishing at all 'times to plant with as much root as can be had.

'As soon as they are pruned they are taken to 'the planters, by the carriers, who are generally a 'set of boys, with some of the worst of the labour-'ers. The planters go in pairs; one makes the 'holes, and the other sets and treads the plants 'fast, which work they commonly do by turns. 'In making of the holes we always take care to 'throw out all the bad soil that comes from the 'bottom: if the planting be on the side of a hill, 'we lay the bad soil on the lower side of the hole, 'so as to form a kind of bason; for without this 'care our plants would lose the advantage of such 'rains as fall hastily. We at all times make the 'holes sufficiently large, which is done with great 'ease after our deep plowing.

'BEFORE we set the plant, we throw a few 'spadefuls of the top soil into the hole, setting 'the plant thereon with its top rather inclining to 'the west; then fill up the hole with the best top 'soil, taking care that it closes well with the 'roots, leaving no part hollow. When the hole 'is well filled up, one of the planters treads and 'fastens the tree firmly with his feet, while his 'partner proceeds to make the next hole.

'THE fastening a tree well is a material article 'in planting; for if it once becomes loose, the 'continual motion which the wind occasions, is 'sure to destroy the fibres as fast as they are pro-'duced, which must end in the destruction of the 'plant, if not prevented. It is to guard against 'this inconveniency that we take off so much of 'the top, as has been described in the article of 'pruning.

'WE plant about three or four hundred Birches 'of the large size on an acre, and nearly the same 'number of the first-sized Oaks; we also plant 'here and there a Beech, Larch, Spanish Chesnut, '&c. exclusive of the patches of the said sorts of 'trees before planted. We then proceed to plant 'plentifully of the second and lesser-sized Oaks; 'and last of all a great number of the small 'Birches, which are procured from the woods at

'about three shillings or three shillings and six-'pence per thousand: these we remove to the 'succeeding plantations after the term of five or 'six years. Of the several sizes of the different 'kinds of trees, we generally plant upwards of 'two thousand plants upon an acre of land, all 'in an irregular manner.

'AFTER the planting is finished, we then sow 'the acorns (provided it be a season that they can 'be had) all over the plantation, except amongst 'the Beech, Larch, &c. in the aforesaid patches. 'Great care should be taken to preserve the acorns 'intended for this purpose, as they are very sub-'ject to sprout, especially soon after gathering; 'the best method is to lay them thin in a dry airy 'place, and give them frequent turnings. We 'sow these acorns in short drills of about a foot 'in length, which work is done very readily by 'two men, one with the acorns, the other with a 'hoe for the purpose of making the drills and 'covering the seed.

'WE are of opinion that the plants produced 'from these acorns will at last make the best trees; 'however, I will not pretend to say how that 'may be, as the Oaks, transplanted small, grow 'equally well for a number of years: but it is 'probable that a tree with its tap-root undisturbed 'may, in the end, grow to a much larger size.

'AFTER the whole is finished to a convenient 'distance round the pruners, we then remove 'their shed to a second station, and there proceed 'in the like manner; and so on till the whole be 'finished.

'IT would be well to get the planting done by 'the end of February, especially for trees of the 'deciduous kind; but from the disappointments 'we meet with, occasioned by the weather, we are 'sometimes detained to a later season.

'I HAVE several times made trial of twelve or 'fourteen kinds of American Oaks sent over to 'his Grace in great quantities. I sowed them in 'the nursery, and also in the best and most shel-'tered parts of the plantations. In both places 'they come up very plentifully; but I now find 'that several of the sorts will not stand the 'severity of our winters, and those that do make 'so small a progress as to promise no other 'encouragement than to be kept as curiosities.

'TOWARDS the end of April, when the ground 'is moist, it will be a great service to go over the 'whole plantations, and fasten all such trees as are 'become loose since their planting: after this, 'nothing more will be required till the month of 'June, when we again go over the whole with 'hoes, cutting off only the tall-growing weeds;

'for the sooner the ground gets covered with 'grass, in our light soil, so much the better.

'I OWN there is something slovenly in the 'appearance of this method, and on some lands I 'would recommend keeping the ground clean 'hoed for some time at first, as also planting in 'rows, which in that case would be necessary. 'More than once I have tried this method on our 'forest hills, and always found, after every hoe-'ing, that the soil was taken away by the succeed-'ing winds into the valleys.

'BESIDES this inconvenience, the reflection of 'our sandy soil is so very great, that we find the 'plants stand a dry season much better in our pre-'sent method, than in the former: and whoever 'fancies that grass will choak and destroy seedling 'Oaks, will, after a few years trial, find himself 'agreeably mistaken: I have even recommended 'the sowing the poorer parts of the hills with furze 'or whin seed, as soon as they are planted: we 'have sometimes permitted the furze to grow in 'the plantations by way of shelter for the game, 'which though it seems to choak and overgrow 'the Oaks for some time, yet after a few years 'we commonly find the best plants in the strong-'est beds of whins. This shews how acceptable 'shelter is to the Oak whilst young; and expe-

'rience shews us, that the Oak would make but a 'slow progress on the forest hills for a number of 'years at the first, were it not for some kind nurses; 'and the Birch seems to answer that purpose the 'best, as I have already observed.

'THE several sorts of Fir trees, from appearance, 'seem to promise a greater shelter; but on the 'forest land they do not grow so fast as the former, 'and what is worse, the Oak will not thrive under 'them, as they do immediately under the Birch.

'WHERE a plantation is on a plain, a screen 'of Firs for its boundary is of singular use, but 'the situation of the forest land denies us this 'advantage.

'WE continue to cut down the tall growing 'weeds two or three times the first summer, and 'perhaps once the next, or second season after 'planting; which is all that we do in respect to 'cleaning. The next winter after planting, we 'fill up the places with fresh plants where they 'have miscarried; after which there is little to be 'done till about the fourth or fifth year; by which 'time the small-sized Birch, and seedling Oaks, 'will be grown to a proper size for transplanting: 'in the thinning of these due care must be had 'not to take too many away in one season, but,

'being properly managed, there will be a supply
'of plants for at least half a dozen years to come.

'ABOUT the same time that the lesser-sized 'Birch wants thinning, the large ones will require 'to have their lower branches taken off, so as to 'keep them from injuring the Oaks; and this is 'the first profit of our plantations, the Birch wood 'being readily brought up by the broom makers. 'This pruning we continue as often as required, 'till the Birches are grown to a sufficient size to 'make rails for fencing; we then cut them down 'to make room for their betters.

'BY this time the Oaks will be grown to the 'height of twelve or fourteen feet, when they draw 'themselves up exceedingly fast: each plant seems 'as it were in a state of strife with its neighbour, 'and in a strict sense they are so, and on no other 'terms than life for life; and he whose fate it is to 'be once over-topped, is soon after compelled to 'give up the contest for ever.

'AFTER the Birches are cut down, there is 'nothing more to be done but thinning the Oaks, 'from time to time, as may be required, and cut-'ting off their dead branches as frequently as may 'be necessary. We are very cautious in doing 'the former, knowing well that if we can but once

'obtain length of timber, time will bring it into 'thickness; therefore we let them grow very close 'together for the first fifty years.

'AND here it may not be improper to observe 'the progress the Oak makes with us, by decribing 'them in two of our plantations, one of twenty-'eight, the other of fifty years growth. In the 'former they are in general about twenty-five or 'twenty-six feet in height, and in girth about 'eighteen inches: the trees in the latter, planted 'in 1725, are something more than sixty feet in 'height, and in girth a little above three feet; and 'these trees are in general about fifty feet in the 'bole, from which you will easily conceive the 'smallness of their tops, even at this age.

'IT would be a difficult matter to describe their 'farther progress with any degree of certainty, 'therefore let it suffice to make this last obser-'vation on them in their mature state.'

'*Welbeck*, 16 *June*, 1775.

THIS valuable Paper does MR. SPEECHLEY great credit. On the species of *Planting*, which he here describes, it is in itself a Treatise.

BUT it strikes us forcibly, that much of the ex-pence of the great and laudable undertaking which

is the subject of it, might have been saved, by *sowing* the tree seeds on the sites to be wooded.

WE are fully aware of the impropriety of keeping, in a loose pulverous state, the intervals of tree plants, on a blowing sand, and in an exposed situation; but, in the method we have mentioned, as being practised in the Midland Counties, of sowing the tree seeds with corn, or of depositing them in the turf of grass land, this ill effect of light sandy land is avoided.

WERE we to recommend a practice for the Sand hills of Sherwood Forest, or for any other site of a similar nature, it would be that of preparing the soil, by a clean fallow, for rye; sowing or dibbling in the tree seeds; mixing those of the timber trees and the nurse plants promiscuously, or in alternate drills; and, having previously guarded the seedling plants, by sufficient fences, to let them remain, under the shelter of the stubble and the weeds that might spring up, until the plants were sufficiently conspicuous, to ascertain their superabundance or deficiency: and having then filled up the vacancies, with the supernumerary plants of such parts as might be too thickly stocked,—setting out the whole at proper distances, as a field of turneps or of seed rape is set out,—let them remain, until future thinnings or cutting be required.

ON all soils, and perhaps in every case where the surface is occupied by a free clean sward, depositing the tree seeds, particularly acorns, among the roots of the grass, will, we are of opinion, be found the most eligible practice. This may be done, either by raising up a tongue of the sward, and putting the acorn under it, as was practised with success, in one instance, in Warwickshire*; or by inserting them with the common dibble; or by pressing them into the turf while wet, with a roller, or with the foot. The acorn will rise, the first summer, eight or ten inches high, and strike down a root a foot or more in depth; thus bidding defiance to the grasses and most of the herbaceous tribes†. However, in bleak situations, where fibrous rooted nurse plants may be required, this mode of cultivation may be the less eligible.

THERE is one circumstance observable, in SEMINATING THE OAK, which is not, we believe, sufficiently attended to. It should never be attempted (unless in extraordinary cases) when acorns are not abundant. It is not the extra cost of acorns, or the difficulty of procuring them, so much as the difficulty of preserving them from

* See the RURAL ECONOMY OF THE MIDLAND COUNTIES, Vol. ii. p. 298.

† See as above, page 308.

vermin, which renders this precaution requisite. In a plentiful year, when every wood and every Hedge-row is strewed with acorns, those which are lodged in the soil are less liable to their ravages.

IT may be needless to observe, that the greater quantity there is sown, in any one place, the less will be the proportional damage. Hence, fifty or a hundred bushels, sown in the field, are more likely to be preserved, than a few in a nursery bed. And, for a similar reason, it may be prudent to sow the margins of a field thicker than the area, where fewer enemies may be expected.

IT now only remains to mention the PLANTATIONS OF THE HIGHLANDS of SCOTLAND,—which have, of late years, spread with astonishing rapidity. There are few men of large property within the Highlands, or on their margins, who have not set out their millions of tree plants, and converted, perhaps, their hundreds of acres to a state of woodland; and this, in places where, twenty years ago, not a stick was seen standing.

ABOUT fifty years since, much planting was done on two of the principal estates of the Highlands, those of ATHOL and BREADALBANE. But the spirit did not diffuse itself until many years after that time.

THE *species of plantation*, found in this quarter of the island, is uniformly the GROVE, on the rugged sides, and on the lower stages, of the mountains. The site is generally too steep, and always too rough and stoney, to admit of being prepared with the plow. And the surface being generally covered with heath, or other coarse mountain plant, *sowing* the tree seeds on the sites, is seldom, we believe, attempted: *planting* being the universal practice; at least, so far as has fallen within our own notice or information.

THE *species of plant* has been, too generally, the NATIVE FIR; except on the lower, better-soiled sites, where the OAK, and other DECIDUOUS TREES have been propagated. Of late years, however, the LARCH has been the favorite plant; it having been found to thrive on the most barren soils, and in the bleakest and most exposed situations, in a manner superior even to the native Pine! And its timber has been proved to be of infinitely greater value. In water work, as well as in ground work,—the best tests of the quality of timber,—the Larch has been found singularly durable.

THE *method of planting* varies, with the age and the nature of the plant, with the state of the ground, and with the skill of the planter.

SEEDLING PLANTS are put in, with a dibble, or with a chop or chops of a spade, in the freest and best parts of the soil. But, for nursery plants, which, when the surface is much encumbered with tall heath, are often planted, we understand*,—holes are made with the spade; first striking off, beneath the surface, the heath and other natural produce; and, then, digging a pit, proportioned to the size of the given plant.

ON planting the *common Fir*, in these holes, the mold that has been raised is reduced with the spade, and returned into the pit; across the center of which a deep wide gash or cleft is opened, with the spade struck down to the bottom of the hole; and the roots of the plant thrust into this cleft; which is closed by treading the soil on either side of it; the whole operation being, in this case, performed by the same person.

BUT, in planting the *Larch* and other trees, in these pits, two persons are employed; the one to hold the plant, the other to reduce the mold and bed the roots, in the ordinary manner.

THIS extra cost of planting may have determined some in favour of the Fir; but, when the

* Not having remained in the Highlands, during the planting season, we speak here, from information.

superior value of the Larch is taken into the account, the saving will become, in the end, a serious loss.

A STRIKING proof of the SUPERIORITY of the LARCH, in *waterworks*, occurred on the estate of Athol. A weir, or river dam, which, while constructed with Oak, required to be renewed or repaired, every four or five years, was formed with Larch; and, in 1792, had stood nine or ten years; the timber, then, remaining in a sound firm state. In the character of *gate posts*, too, the Larch has been found to be singularly durable.

IT is somewhat astonishing, that, seeing the success of the LARCH on the estate of Athol, during the last half century, its propagation should not have spread more rapidly. There is probably more Larch timber, now, on that estate, than in the rest of the island. In 1792, His Grace the Duke of Athol (we speak from the highest authority) was possessed of a thousand Larch trees, then growing on his estates of Dunkeld and Blair only, of not less than two to four tons of timber each; and had, at that time, a million Larches, of different sizes, rising rapidly on his estate. These alone, IF PROPERLY TRAINED*, would supply the British navy with ship timber,

* See page 143.

for a length of years. Should the spirit of propagating the Larch continue, nay, were it to expire at this time (1795), the Highlands of Scotland, alone, will henceforward be able to furnish the whole commerce of the Island with timber for its shipping.

IT is not, therefore, on the mountains of Scotland, we *now* recommend, with eager solicitude, the propagation of the Larch. We have lands in England, and nearer to our ship yards, which will probably pay a hundred fold in Larch, compared with any other crop they are capable of producing. We mean, generally, the barren heathy surfaces which occupy no inconsiderable portion of the kingdom; but more particularly, the singularly INFERTILE FLATS OF HEATH, in the SOUTHERN COUNTIES of Surrey, Sussex, and Hampshire: lands which, at present, lie in a manner useless to the community; yet on which we have seen the Larch rising with luxuriance!

IF these wastes should be planted progressively, with the Larch, and their produce properly TRAINED FOR SHIP BUILDING, the several yards of Portsmouth, Deptford, Chatham, &c. to which it might, at all times, be safely and readily conveyed by inland navigation, could not experience a want of timber, for ages to come.

WERE other wastes of a similar nature, lying in different parts of the Island, particularly the MOUNTAIN BROWS of the ENGLISH HIGHLANDS, in Yorkshire, Westmoreland, &c. and also the Cornish and Devonshire Mountains, with the Welch and Salopian Hills, together with other barren heights, at present merely blank surfaces, which lie a disgrace to the POLITICAL, as well as the RURAL ECONOMY of the kingdom, converted to the same valuable purpose, a supply of foreign timber might, in half a century, become unnecessary; and this, without any, or but an inconsiderable, abridgment of Agricultural produce.

THE Larch not only flourishes in bleak and barren sites, but ENCREASES with a RAPIDITY unknown to every other durable wood. In the grounds of BLAIR OF ATHOL, we measured a Larch, which, at five feet high, girted upwards of eight feet, and contained by estimation four tons of timber; which Larch, by the indisputable evidence of a person who remembered its being planted, was not, at the time we measured it, 1792, fifty-four years old. And, at DUNKELD, we measured another, of very little more than fifty years old, which girted, at the same height, eight feet six inches; its height near a hundred feet, and its contents from four to five tons of timber.

We are not apt to be carried away by novel ideas, and upstart practices; on the contrary, seeing the false basis on which they too frequently rest, we may sometimes, perhaps, remain in doubt, when we ought to decide: but, believing this to be the safer conduct, we adhere, and mean to adhere, to our principle. Nevertheless, in the multitude of evidences which have occurred to us, in favour of the tree now under notice, we find sufficient ground for decision; and we think it right to lose no time, in recommending it to the attention of men of property, in every district of the Island, in which barren heathy lands are found.

SECTION THE THIRD.

COPPICES.

AFTER what has been recommended, in the foregoing Sections, with regard to the raising of WOODS and GROVES, scarcely anything remains to be added, here, respecting COPPICES; the proper culture being similar, in the several cases.

THE MODERN COPPICES OF KENT (we speak more particularly of the district of Maidstone), raised for the purpose of hop poles, are chiefly of *Ash* and *Chesnut*; which are generally *cultivated in*

rows; the intervals being kept clean, as those of hop grounds; and the profits arising from them is almost incredible.

ONE particular in the Kentish practice deserves notice. To keep the *intervals free from weeds*, and the *soil mellow*, they are thickly *covered with* "*hop bines*,"—the stalks of hops as freed from the poles,—and with good effect. When these bines have performed their office, and are become sufficiently tender for the operation, they are dug under as manure. Furze, Broom, or rough bushes, might be used in the same intention.

IN RAISING A COPPICE, as in cultivating any other species of woodland, the first business is to *regulate the plants*; to set them out, at proper distances, where they are too thick, and to fill up the vacant spaces with the supernumerary plants.

SOMETHING, too, may afterwards be done, by judicious *thinnings*; but less in coppices, than in the other two species of woodland. However, where the demand of the country calls for the larger articles of coppice ware, many stakes, binding rods, &c. may be cut out, with advantage to the free-shooting plants, left to grow up, to supply the markets of the given districts; which will ever determine the SPECIES of COPPICE WOOD. See p. 119, and the SPECIES OF UNDERWOOD, p. 130.

ONE species of coppice wood, however, requires to be particularly noticed; as its uses are adapted to every district: namely, the OZIER; which, in low moist situations, may be cultivated, on a small scale at least, with great advantage to every farm; for binders, thatching rods, hurdles, edders, stakes, rake handles, sithe handles, and other utensils of husbandry, and for poles and rails of almost any length*.

IN cultivating the Ozier, as a coppice wood, on moist moory sites, the first step is to throw the

* WILLOW POLLARDS are useful in the same intention; but do not afford such a length and cleanness of stem, as a close coppice. Nevertheless, they are planted, with great profit, by the sides of brooks and rivulets, passing through meadowy and marshy grounds, in many parts of the Island; and might, in many others, be planted with equal benefit.

An error, too frequently committed, in planting Willow poles for Pollards, is to set them within the banks of the rivulet or brook; to the future injury of its channel: a practice which no commission of sewers, or manor inquest, should suffer.

The proper situation for these Pollards is some feet, not less than half a rod, from the brink of the channel: a situation, which the *Salix* tribe in general prefer; the roots soon reach the moisture, and thus gain a double range of pasturage. In this situation, too, the trees afforda salutary shade to cattle in hot whether, without danger to themselves, or injury to the channel or its banks.

soil into beds, so as to lay the surface sufficiently dry; the Ozier disliking an unsound situation.

THIS work should be done in autumn, when the soil, having had all the summer to grow firm in, will stand to the spade; and the sides of the trenches will then be less liable to give way than they would, in the spring, when the soil is filled like a sponge with water; which ouzing out, from beneath the beds, into the new-made trenches, their sides become undermined; and can never, afterwards, be made to stand properly: on the contrary, if the trenches be opened in autumn, and the mold which comes out of them be used in filling up the hollows, and laying the surface even and round, the winter's rains will not pass through the soil, but will run off the surface, and rather assist in establishing the beds, than in rendering them tender.

IN March, the beds being firmly established, and their surfaces in good working order, the soil should be thoroughly trenched with the spade, and truncheons inserted.

THE sets should be put in, about two feet from each other, and a potatoe plant may be dibbled into the center of each interspace. During summer,

the surface should be kept clean hoed, and the potatoes earthed up, from time to time.

IN autumn, after the potatoes are taken up, the soil ought to be drawn towards the roots of the plants, leaving channels between them to carry off the winter's rains. The ensuing spring, the plants must be looked over, and such as have failed should be replaced with fresh strong sets.

AFTER this, little more will be necessary than keeping down the taller weeds: if, however, in the course of three or four years, the plants do not gain entire possession of the soil, by overcoming the weeds and grassiness, they must be cut down to the stub, the interspaces dug, the rubbish of the surface turned in, and the roots of the plants freed from incumbrances, with the hoe: A second crop of potatoes may be taken, and the former treatment repeated.

THUS far as to the *Coppice*: we will conclude this section with some observations on what is termed the OZIER BED; kept for the particular purpose of the BASKET MAKER.

NOTWITHSTANDING the Ozier is usually planted near water, we have good reason to believe it affects a *sound*, if not a dry soil. The places it

most delights in are drained moors, and the banks of large rivers, both of which are peculiarly dry situations: it has no dislike, however, to being flooded occasionally, but seems to be invigorated by such irrigation: therefore, the sand banks, which we frequently see thrown up by the sides of rivers, and which sometimes lie for half a century before they become profitable, are peculiarly eligible to be converted into Ozier grounds.

THE method of planting an Ozier ground is this: The soil being laid perfectly dry, and its surface made thoroughly clean, cuttings, of the second or third year's growth, and about twelve inches long, are planted in drills, about two feet and a half asunder, in the month of March. The cuttings ought to be thrust seven or eight inches deep, leaving four or five inches of head above ground.

THE intervals should be kept stirred with a small plow; or, the first year, a crop of potatoes may be taken; the drills, in either case, must be kept perfectly clean with the hand hoe; and, at the approach of winter, the intervals should be split, and the mold thrown to the roots of the young plants, in order to lay them dry and warm, during winter.

IN spring, it will be well to trim off the first year's shoots (though not necessary), and replace the plants which have failed, with fresh cuttings.

THE second summer, the intervals must be kept stirred, the drills hoed, and the plants earthed up, as before, against winter.

THE ensuing spring, the stools must again be cleared; although the twigs, as yet, will be of little value. But the third cutting they will produce marketable ware, and will increase, in quantity and value, until the profits arising from them will be almost incredible. In situations which the Ozier affects, and in countries where the twigs are in demand, Ozier grounds have been known to pay an annual rent of ten pounds an acre! Under ordinary circumstances, they will, if properly managed, pay four or five.

IN Yorkshire, the "wands" are sold by the bundle; but in Glocestershire, where Ozier grounds abound, upon the banks of the Severn, the grounds are let, under lease, to basket makers, who keep up the fences, and take upon themselves the entire management during the term of the lease.

SECTION THE FOURTH.

WOODED WASTES.

NO inconsiderable part of the face of this country, taken collectively, is disfigured by lands bearing this description*; the remedy, however, is easy, and the disgrace may soon be removed.

If the soil and situation be favorable to grass or arable produce, grub up the bushes, and clear away the rubbish; but on the contrary, if the land, either from its own nature, or from the proportion of woodiness which has already got possession of its surface, can be more profitably converted into Woodland, fill up the vacant spaces, in the following manner:

The first business is to fence it round, and the next to cut down the underwood to the stub, and set up the timber trees. If the vacancies be small, they ought to be trenched with the spade; if large, they may be fallowed with the plow; or, in either

* See page 119.

case, the plants may be put in, without any other preparation, than digging holes to receive them: however, with *this* kind of management, success can only be *hoped for*, while under *that* it may be *secured*.

THE species of wood and the mode of propagation depend upon locality, and the species of plantation required. If underwood be an object, the smaller chasms may be filled up, by layering; for which purpose young shoots ought to be left, when the brush wood is felled, for layers: if timber alone be the desired object, seedling plants may be put in, and acorns or other seeds dibbled in the interspaces: Whether the Wood, the Grove, or the Coppice, be intended, the large spaces ought to be filled up in that way; or seeds, only, may be sown in drills, and treated as before directed; or they may be scattered in the random manner, and the seedlings kept clean by weeding and hand hoeing; or the fostering care may be left to nature alone: indeed, in *this* kind of way, Woods and Timber Groves may be propagated.

A GENERAL REMARK ON THE PRACTICE OF PLANTING.

WE do not, however, mean to recommend to our readers, here, practices depending on *chance*;

after having been solicitous to point out those which may be pursued with *certainty*.

GENTLEMEN, when they set about forming plantations, or raising Woodlands, ought to consider, that the labour, the fencing, the seeds or plants, the rent, and other contingent charges of the land, their own present credit, and their future fame, are *staked*. If, after waiting eight or ten years, a miscarriage take place, the whole is *lost*. On the contrary, if, by judicious methods and careful management, no material failure happen, the prize is *won*; not only the principal but interest is secured: and this by a small additional expence; the trifling difference in labour bestowed upon the after management, only; for the labour in the first instance, rent, &c. &c. &c. are in both cases similar.

A HINT RESPECTING THE MANAGER OF PLANTATIONS.

MUCH depends upon the person to whose care and management plantations are entrusted. If a Gentleman has not leisure, nor inclination, to attend to them himself, he ought to appoint a man of experience; and, if possible, one who is *settled* near the seat of planting; and who is likely to enjoy his appointment for some length of time. For

he who plants ought to expect to nurse; and having planted he ought to nurse, because his own credit is at a stake. On the contrary, a Gentleman who is continually changing his planter, must never expect to see his plantations succeed; for the credit of the present rises upon the miscarriage of his predecessor: he has even an interest in neglecting to nurse; because his own planting will be thereby set off to advantage. On the other hand, being without hopes of seeing his own labors succeed, he loses a necessary stimulus: he is not sufficiently interested; having a ready *excuse*, in the neglect of his successor. These are not theoretical deductions, but are drawn from observation.

SUBJECT THE SECOND.

RURAL ORNAMENT.

DIVISION THE FIRST.

HISTORY OF THE RURAL ART.

INTRODUCTION.

MANKIND no sooner find themselves in fast possession of the *necessaries* of life, than they begin to feel a want of its *conveniences*; and these obtained, seldom fail of indulging in one or more of its various *refinements*. Some men delight in the luxuries of the imagination; others in those of the senses. One man finds his wants supplied in the delicacies of the table, while another has recourse to perfumes and essences for relief: few men are insensible to the gratifications of the ear; and men

in general are susceptible of those of the eye. The imitative arts of painting and sculpture have been the study and delight of civilized nations, in all ages: but the art of embellishing Nature, herself, has been reserved for this age, and for this nation!

A FACT the more astonishing, as ornamented Nature is as much superior to a Painting or a Statue, as a "Reality is to a Representation;"—as the Man himself is to his Portrait. That the striking features—the beauties—of Nature, whenever they have been *seen*, have always been *admired*, by men of sense and refinement, is undoubtedly true; but why the good offices of art, in setting off those features to advantage, should have been so long confined to the human person alone, is, of all other facts in the History of Arts and Sciences, the most extraordinary.

THE Translator of D'Ermenonville's Essay on Landscape has attempted to prove, in an introductory discourse, that the art is nothing *new*, for that it was *known* to the Antients, though not *practised*. But the evidences, he produces, go no farther than to shew, that the Antients were *admirers of Nature in a state of wildness*; for, whenever they attempted to *embellish* Nature, they appear to have been guided by a kind of Otaheitean

taste; as the gardens of the Greeks and Romans, like those of modern nations (until of late years in this country), convey to us no other idea, than that of *Nature tatoo'd**.

MR. BURGH, in a Note to his ingenious Commentary upon Mr. Mason's beautiful poem, *The English Garden*, confirms us in these ideas; and, by a quotation from the Younger Pliny, shews the just notions the Antients entertained of the powers of human invention, in associating and polishing the rougher scenes of Nature: for, after giving us a beautiful description of the natural scenery round his Tuscan villa, upon the banks of the Tiber, he acknowledges "the view before him to resemble "a picture beautifully composed, rather than a "work of Nature accidentally delivered."

WE have been told that the English Garden is but a copy of the Gardens of the Chinese: this, however, is founded in envy rather than in truth;

* The inhabitants of Otaheitee, an island in the Southern hemisphere, ornament their bodies by making punctures in the skin with a sharp-pointed instrument, and call it *tatowing*. The African Negroes are still grosser in their ideas of ornament, gashing their cheeks and temples in a manner similar to that practised by the English Butcher in ornamenting a shoulder of mutton, or a Dutch gardener in embellishing the environs of a mansion.

for though the Chinese style of Gardening may not admit of *tatooings* and *topiary works**, it has as little to do with natural scenery as the garden of an antient Roman, or a modern Dutchman:— THE ART OF *assisting* NATURE is, undoubtedly, all our own.

IT cannot fail of proving highly interesting to our Readers, to trace the rise of this delightful Art.

MR. WALPOLE, in his *Anecdotes of Painting in England*, has favoured the Public with *A History of the modern Taste in Gardening*. A pen guided by so masterly a hand, must ever be productive of information and entertainment, when employed upon a subject so truly interesting, as that which is now before us. Desirous of conveying to our Readers all the information, which we can compress with propriety within the limits of our plan, we wished to have given the *substance* of this valuable paper; but finding it, already, in the language of simplicity, and being aware of the mischiefs which generally ensue in *meddling* with the productions of genius, we had only one alternative; either wholly to transcribe, or wholly to reject. *This* we could not do, in strict justice to our

* Trees carved by a *Topiarious* into the form of beasts, birds, &c.

Readers; for, besides giving us, in detail, the advancement of the art, it throws considerable light upon the art itself; and being only a small part of a work upon a different subject, it is the less likely to fall into the hands of those, to whom it cannot fail of proving highly interesting. We are, therefore, induced to exceed our intended limits, in this respect, by making a literal transcript; and we have obtained, through the well known liberality of the Author, his permission for so doing.

HISTORY OF THE MODERN TASTE IN GARDENING.

'GARDENING was probably one of the first 'arts that succeeded to that of building houses, 'and naturally attended property and individual 'possession. Culinary, and afterwards medicinal 'herbs were the objects of every head of a family: 'it became convenient to have them within reach, 'without seeking them at random in woods, in 'meadows, and on mountains, as often as they 'were wanted. When the earth ceased to furnish 'spontaneously all these primitive luxuries, and 'culture became requisite, separate inclosures for 'rearing herbs grew expedient. Fruits were in 'the same predicament, and those most in use or 'that demanded attention, must have entered into

'and extended the domestic inclosure. The good 'man Noah, we are told, planted a vineyard, 'drank of the wine, and was drunken, and every 'body knows the consequences. Thus we acquir'ed kitchen gardens, orchards, and vineyards. 'I am apprized that the prototype of all these 'sorts was the garden of Eden; but as that Para'dise was a good deal larger than any we read of 'afterwards, being inclosed by the rivers Pison, 'Gihon, Hiddekel, and Euphrates, as every tree 'that was pleasant to the sight and good for food 'grew in it, and as two other trees were like'wise found there, of which not a slip or sucker 'remains, it does not belong to the present 'discussion. After the Fall, no man living was 'suffered to enter into the garden; and the po'verty and necessities of our first ancestors hardly 'allowed them time to make improvements in 'their estates in imitation of it, supposing any 'plan had been preserved. A cottage and a slip 'of ground for a cabbage and gooseberry bush, 'such as we see by the side of a common, were in 'all probability the earliest seats and gardens: a 'well and bucket succeeded to the Pison and 'Euphrates. As settlements increased, the or'chard and the vineyard followed; and the ear'liest princes of tribes possessed just the neces'saries of a modern farmer.

'MATTERS, we may well believe, remained 'long in this situation; and though the generality of mankind form their ideas from the import of words in their own age, we have no reason 'to think that for many centuries the term Garden 'implied more than a kitchen-garden or orchard. 'When a Frenchman reads of the garden of Eden, 'I do not doubt but he concludes it was something 'approaching to that of Versailles, with clipt 'hedges, berceaus, and trellis-work. If his devotion humbles him so far as to allow that, considering who designed it, there might be a labyrinth full of Æsop's Fables, yet he does not conceive, that four of the largest rivers in the world 'were half so magnificent as an hundred fountains 'full of statues by Girardon. It is thus that the 'word Garden has at all times passed for whatever 'was understood by that term in different countries. But that it meant no more than a kitchen-garden or orchard for several centuries, is evident 'from those few descriptions that are preserved of 'the most famous gardens of antiquity.

'THAT of Alcinous, in the Odyssey, is the 'most renowned in the heroic times. Is there an 'admirer of Homer, who can read his description without rapture; or who does not form 'to his imagination a scene of delights more picturesque than the landscapes of Tinian or Juan

'Fernandez? Yet what was that boasted Paradise with which

> the Gods ordain'd
> To grace Alcinous and his happy land?——POPE.

'Why, divested of harmonious Greek and bewitching poetry, it was a small orchard and vineyard, with some beds of herbs, and two fountains, that watered them, inclosed within a quickset hedge. The whole compass of this pompous garden inclosed—four acres.

> Four acres was th' allotted space of ground,
> Fenc'd with a green inclosure all around.

'The trees were apples, figs, pomegranates, pears, olives, and vines.

> Tall thriving trees confess'd the fruitful mold;
> The redning apple ripens into gold.
> Here the blue fig with luscious juice o'erflows,
> With deeper red the full pomegranate glows.
> The branch here bends beneath the weighty pear,
> And verdant olives flourish round the year.
>
> * * * * *
>
> Beds of all various herbs, for ever green,
> In beauteous order terminate the scene.

'Alcinous's garden was planted by the poet, enriched by him with the fairy gift of eternal summer, and, no doubt, an effort of imagination, surpassing any thing he had ever seen. As he has bestowed on the same happy prince a palace

'with brazen walls and columns of silver, he cer-
'tainly intended that the garden should be pro-
'portionably magnificent. We are sure, there-
'fore, that as late as Homer's age, an inclosure
'of four acres, comprehending orchard, vineyard,
'and kitchen garden, was a stretch of luxury the
'world at that time had never beheld.

'THE hanging gardens of Babylon were a still
'greater prodigy. We are not acquainted with
'their disposition or contents, but, as they are sup-
'posed to have been formed on terrasses and the
'walls of the palace, whither soil was conveyed on
'purpose, we are very certain of what they were
'not; I mean they must have been trifling, of no
'extent, and a wanton instance of expence and
'labour. In other words, they were what sump-
'tuous gardens have been in all ages till the pre-
'sent, unnatural, enriched by art, possibly with
'fountains, statues, balustrades, and summer-
'houses, and were anything but verdant and rural.

'FROM the days of Homer to those of Pliny,
'we have no traces to lead our guess to what were
'the gardens of the intervening ages. When Ro-
'man authors, whose climate instilled a wish for
'cool retreats, speak of their enjoyments in that
'kind, they sigh for grottos, caves, and the refresh-
'ing hollows of mountains, near irriguous and

'shady founts; or boast of their porticos, walks of 'planes, canals, baths, and breezes from the sea. 'Their gardens are never mentioned as affording 'shade and shelter from the rage of the dog-star. 'Pliny has left us descriptions of two of his villas. 'As he used his Laurentine villa for his winter 'retreat, it is not surprising that the garden makes 'no considerable part of the account. All he says 'of it is, that the *gestatio* or place of exercise, 'which surrounded the garden (the latter conse-'quently not being very large), was bounded by 'a hedge of box, and where that was perished, 'with rosemary; that there was a walk of vines, 'and that most of the trees were fig and mulberry, 'the soil not being proper for any other sorts.

'ON his Tuscan villa he is more diffuse; the 'garden makes a considerable part of the de-'scription:—and what was the principal beauty 'of that pleasure ground? Exactly what was the 'admiration of this country about threescore years 'ago; box-trees cut into monsters, animals, let-'ters, and the names of the master and the artifi-'cer. In an age when architecture displayed all 'its grandeur, all its purity, and all its taste; when 'arose Vespasian's amphitheatre, the temple of 'Peace, Trajan's forum, Domitian's baths, and 'Adrian's villa, the ruins and vestiges of which 'still excite our astonishment and curiosity; a

'Roman consul, a polished emperor's friend, and 'a man of elegant literature and taste, delighted in 'what the mob now scarce admire in a college 'garden. All the ingredients of Pliny's corre-'sponded exactly with those laid out by London 'and Wise on Dutch principles. He talks of 'slopes, terraces, a wilderness, shrubs methodi-'cally trimmed, a marble bason,* pipes spouting 'water, a cascade falling into the bason, bay trees, 'alternately planted with planes, and a straight 'walk, from whence issued others parted off by 'hedges of box, and apple trees, with obelisks 'placed between every two. There wants nothing 'but the embroidery of a parterre, to make a gar-'den in the reign of Trajan serve for a description 'of one in that of King William †. In one passage

'* The English gardens described by Hentzner in the reign 'of Elizabeth, are exact copies of those of Pliny. In that at 'Whitehall was a sun-dial and jetd'eau, which, on turning a 'cock, spurted out water and sprinkled the spectators. In 'Lord Burleigh's at Theobalds were obelisks, pyramids, and 'circular porticos, with cisterns of lead for bathing. At 'Hampton Court the garden walls were covered with rose-'mary, a custom, he says, very common in England. At 'Theobalds was a labyrinth also, an ingenuity I shall mention 'presently to have been frequent in that age.

'† Dr. Plot, in his Natural History of Oxfordshire, p. 380, 'seems to have been a great admirer of trees carved into the 'most heterogeneous forms, which he calls *topiary works*, and

'above, Pliny seems to have conceived that natu-'ral irregularity might be a beauty; *in opere urba-'nissimo*, says he, *subita velut illati ruris imitatio.* 'Something like a rural view was contrived amidst 'so much polished composition. But the idea 'soon vanished, lineal walks immediately enve-'loped the slight scene, and names and inscrip-'tions in box again succeeded to compensate for 'the daring introduction of nature.

'In the paintings found at Herculaneum are a 'few traces of gardens, as may be seen in the second 'volume of the prints. They are small square in-'closures, formed by trellis work, and espaliers*, 'and regularly ornamented with vases, fountains, 'and caryatides, elegantly symmetrical, and pro-'per for the narrow spaces allotted to the garden of 'a house in a capital city. From such I would not 'banish those playful waters that refresh a sultry

'quotes one Laurembergius for saying that the English are as 'expert as most nations in that kind of sculpture, for which 'Hampton Court was particularly remarkable. The Doctor 'then names other gardens that flourished with animals and 'castles, formed *arte topiariâ*, and above all a wren's nest, 'that was capacious enough to receive a man to sit on a seat 'made within it for that purpose.

'* At Warwick Castle is an antient suit of arras, in which 'there is a garden exactly resembling these pictures of Her-'culaneum.

'mansion in town, nor the neat trellis, which pre-'serves its wooden verdure better than natural 'greens exposed to dust. Those treillages, in the 'gardens at Paris, particularly on the Boulevard, 'have a gay and delightful effect. They form 'light corridores, and transpicuous arbours, 'through which the sun-beams play and checquer 'the shade, set off the statues, vases, and flowers, 'that marry with their gaudy hotels, and suit the 'gallant and idle society who paint the walks be-'tween their parterres, and realize the fantastic 'scenes of Watteau and Durfé.

'FROM what I have said, it appears how natu-'rally and insensibly the idea of a kitchen garden 'slid into that which has for so many ages been 'peculiarly termed a Garden, and by our ancestors 'in this country, distinguished by the name of a 'Pleasure garden. A square piece of ground was 'originally parted off in early ages for the use of 'the family:—to exclude cattle, and ascertain the 'property, it was separated from the fields by a 'hedge. As pride, and desire of privacy increased, 'the inclosure was dignified by walls; and, in 'climes where fruits were not lavished by the ri-'pening glow of nature and soil, fruit-trees were 'assisted and sheltered from surrounding winds by 'the like expedient; for the inundation of luxuries 'which have swelled into general necessities, have

'almost all taken their source from the simple 'fountain of reason.

'WHEN the custom of making square gardens 'inclosed with walls was thus established, to the 'exclusion of nature and prospect*, pomp and 'solitude combined to call for something that 'might enrich and enliven the insipid and unani- 'mated partition. Fountains, first invented for 'use, which grandeur loves to disguise and throw 'out of the question, received embellishments 'from costly marbles, and at last, to contradict 'utility, tossed their waste of waters into air in 'spouting columns. Art, in the hands of rude 'man, had at first been made a succedaneum to 'nature; in the hands of ostentatious wealth, it 'became the means of opposing nature; and the 'more it traversed the march of the latter, the 'more nobility thought its power was demon- 'strated. Canals measured by the line were in- 'troduced in lieu of meandering streams, and ter- 'races were hoisted aloft in opposition to the facile 'slopes that imperceptibly unite the valley to the 'hill. Balustrades defended these precipitate and 'dangerous elevations, and flights of steps rejoined 'them to the subjacent flat from which the terrace

'* It was not uncommon, after the circumadjacent coun- 'try had been shut out, to endeavour to recover it by raising 'large mounts of earth to peep over the walls of the garden.

'had been dug. Vases and sculpture were added 'to these unnecessary balconies, and statues fur-'nished the lifeless spot with mimic representa-'tions of the excluded sons of men. Thus difficulty 'and expence were the constituent parts of those 'sumptuous and selfish solitudes; and every im-'provement that was made, was but a step farther 'from nature. The tricks of water-works to wet 'the unwary, not to refresh the panting spectator, 'and parterres embroidered in patterns like a pet-'ticoat, were but the childish endeavours of fashion 'and novelty to reconcile greatness to what it had 'surfeited on. To crown these impotent displays 'of false taste, the sheers were applied to the 'lovely wildness of form with which Nature has 'distinguished each various species of tree and 'shrub. The venerable Oak, the romantic 'Beech, the useful Elm, even the aspiring circuit 'of the Lime, the regular round of the Chesnut, 'and the almost moulded Orange Tree, were cor-'rected by such fantastic admirers of symmetry. 'The compass and square were of more use in 'plantations than the nursery man. The measured 'walk, the quincunx, and the etoile, imposed their 'unsatisfying sameness on every royal and noble 'garden. Trees were headed, and their sides 'pared away; many French groves seem green 'chests set upon poles. Seats of marble, arbours, 'and summer-houses, terminated every visto; and

'symmetry, even where the space was too large to 'permit its being remarked at one view, was so 'essential, that, as Pope observed,

> ———each alley has a brother,
> And half the garden just reflects the other.

'Knots of flowers were more defensibly subjected 'to the same regularity. Leisure, as Milton ex- 'pressed it,

> in trim gardens took his pleasure.

'In the garden of Marshal de Biron at Paris, con- 'sisting of fourteen acres, every walk is buttoned 'on each side by lines of flower-pots, which suc- 'ceed in their seasons. When I saw it, there 'were nine thousand pots of Asters, or la Reine 'Marguerite.

'WE do not precisely know what our ancestors 'meant by a bower; it was probably an arbour; 'sometimes it meant the whole frittered inclosure, 'and in one instance it certainly included a laby- 'rinth. Rosamond's bower was indisputably of 'that kind, though whether composed of walls or 'hedges we cannot determine*. A square and a

* 'Drayton in a note to his Epistle of Rosamond, says, her 'labyrinth was built of vaults under ground, arched and 'walled with brick and stone; but, as Mr. Gough observes,

'round labyrinth were so capital ingredients of a 'garden formerly, that in Du Cerceau's architec-'ture, who lived in the time of Charles IX. and 'Henry III. there is scarce a ground-plot without 'one of each. The enchantment of antique ap-'pellations has consecrated a pleasing idea of a 'royal residence, of which we now regret the ex-'tinction. Havering in the Bower, the jointure 'of many dowager queens, conveys to us the no-'tion of a romantic scene.

'IN Kip's Views of the Seats of our Nobility 'and Gentry, we see the same tiresome and re-'turning uniformity. Every house is approached 'by two or three gardens, consisting perhaps of a 'gravel-walk and two grass-plats, or borders of 'flowers. Each rises above the other by two or 'three steps, and as many walls and terraces, and 'so many iron gates, that we recollect those antient 'romances, in which every entrance was guarded 'by nymphs or dragons. At Lady Orford's, at 'Piddletown, in Dorsetshire, there was, when my 'brother married, a double inclosure of thirteen 'gardens, each I suppose not much above an hun-'dred yards square, with an enfilade of correspon-

'he gives no authority for that assertion. V. pref. to 2d edit. 'of British Topography, p. xxx. Such vaults might remain 'to Drayton's time, but did not prove that there had been no 'superstructure.'

'dent gates; and before you arrived at these, you 'passed a narrow gut between two stone terraces, 'that rose above your head, and which were 'crowned by a line of pyramidal yews. A bow-'ling-green was all the lawn admitted in those 'times, a circular lake the extent of magnificence.

'YET though these and such preposterous incon-'veniences prevailed from age to age, good sense 'in this country had perceived the want of some-'thing at once more grand and more natural. 'These reflections, and the bounds set to the waste 'made by royal spoilers, gave origin to Parks. 'They were contracted forests, and extended gar-'dens. Hentzner says, that, according to Rous 'of Warwick, the first park was that at Wood-'stock. If so, it might be the foundation of a 'legend that Henry II. secured his mistress in a 'labyrinth: it was no doubt more difficult to find 'her in a park than in a palace, where the intri-'cacy of the woods and various lodges buried in 'covert might conceal her actual habitation.

'IT is more extraordinary that having so long 'ago stumbled on the principle of modern garden-'ing, we should have persisted in retaining its re-'verse, symmetrical and unnatural gardens. That 'parks were rare in other countries, Hentzner, 'who travelled over great part of Europe, leads us

'to suppose, by observing that they were common in England. In France they retain the 'name, but nothing is more different both in compass and disposition. Their parks are usually 'square or oblong inclosures, regularly planted 'with walks of chesnuts or limes, and generally 'every large town has one for its public recreation. 'They are exactly like Burton's-court at Chelsea-college, and rarely larger.

'ONE man, one great man we had, on whom 'nor education nor custom could impose their prejudices; who, "on evil days though fallen, and "with darkness and solitude compassed round," 'judged that the mistaken and fantastic ornaments 'he had seen in gardens, were unworthy of the 'Almighty Hand that planted the delights of 'Paradise. He seems, with the prophetic eye of 'taste (as I have heard taste well defined*), to 'have conceived, to have foreseen modern gardening; as Lord Bacon announced the discoveries 'since made by experimental philosophy. The 'description of Eden is a warmer and more just 'picture of the present style than Claud Lorrain 'could have painted from Hagley or Stourhead.

* 'By the great Lord Chatham, who had a good taste 'himself in modern gardening, as he shewed by his own 'villas in Enfield Chace and at Hayes.

'The first lines I shall quote exhibit Stourhead 'on a more magnificent scale:

Thro' Eden went a river large,
Nor chang'd his course, but through the shaggy hill
Pass'd underneath'd ingulph'd, for God had thrown
That mountain as his garden-mound, high rais'd
Upon the rapid current———

'Hagley seems pictured in what follows:

which thro' veins
Of porous earth with kindly thirst updrawn,
Rose a fresh fountain, and with many a rill
Water'd the garden———

'What colouring, what freedom of pencil, what 'landscape in these lines!

——from that saphire fount the crisped brooks,
Rolling on orient pearl and sands of gold,
With mazy error under pendent shades
Ran nectar, visiting each plant, and fed
Flow'rs worthy of Paradise, which not *nice art*
In beds and curious knots but *nature* boon
Pour'd forth profuse on hill and dale and plain,
Both where the morning sun first warmly smote
The *open field*, and where the unpierc'd shade
Imbrown'd the noon-tide bow'rs.—*Thus was this place*
A happy rural seat of various view.

'Read this transporting description, paint to your 'mind the scenes that follow, contrast them with 'the savage but respectable terror with which 'the Poet guards the bounds of his Paradise, 'fenced

——with the champaign head
Of a steep wilderness, whose hairy sides
With thicket overgrown, grotesque and wild,
Access denied; and over head upgrew
Insuperable height of loftiest shade,
Cedar and pine, and fir, and branching palm,
A sylvan scene, and as the ranks ascend,
Shade above shade a woody theatre
Of stateliest view——

'and then recollect that the author of this sublime 'vision had never seen a glimpse of any thing like 'what he has imagined, that his favorite Antients 'had dropped not a hint of such divine scenery, 'and that the conceits in Italian gardens, and 'Theobalds and Nonsuch, where the brightest 'originals that his memory could furnish. His 'intellectual eye saw a nobler plan, so little did he 'suffer by the loss of sight. It sufficed him to 'have seen the materials with which he could 'work. The vigour of a boundless imagination 'told him how a plan might be disposed, that 'would embellish nature, and restore art to its

'proper office, the just improvement or imitation 'of it*.

'It is necessary that the concurrent testimony of 'that age should swear to posterity that the description above quoted was written above half a century before the introduction of modern gardening, or our incredulous descendants will defraud 'the poet of half his glory, by being persuaded that 'he copied some garden or gardens he had seen— 'so minutely do his ideas correspond with the 'present standard. But what shall we say for that 'intervening half century who could read that 'plan and never attempt to put it in execution?

'Now let us turn to an admired writer, posterior 'to Milton, and see how cold, how insipid, how 'tasteless is his account of what he pronounced a 'perfect garden. I speak not of his style, which 'it was not necessary for him to animate with the 'colouring and glow of poetry. It is his want 'of ideas, of imagination, of taste, that I censure, 'when he dictated on a subject that is capable of 'all the graces that a knowledge of beautiful nature 'can bestow. Sir William Temple was an excellent man; Milton a genius of the first order.

* 'Since the above was written, I have found Milton praised 'and Sir William Temple censured, on the same foundations, 'in a poem called The Rise and Progress of the present Taste 'in Planting, printed in 1767.'

'WE cannot wonder that Sir William declares 'in favour of parterres, fountains, and statues, as 'necessary to break the sameness of large grass-'plats, which he thinks have an ill effect upon the 'eye, when he acknowledges that he discovers 'fancy in the gardens of Alcinous. Milton studied 'the Antients with equal enthusiasm, but no bigo-'try, and had judgement to distinguish between the 'want of invention and the beauties of poetry. 'Compare his Paradise with Homer's Garden, 'both ascribed to a celestial design. For of Sir 'William, it is just to observe, that his ideas cen-'tered in a fruit-garden. He had the honour of 'giving to his country many delicate fruits, and 'he thought of little else than disposing them to the 'best advantage. Here is the passage I proposed 'to quote; it is long, but I need not make an 'apology to the reader for entertaining him with 'any other words instead of my own.

"THE best figure of a garden is either a square "or an oblong, and either upon a flat or a descent: "they have all their beauties, but the best I esteem "an oblong upon a descent. The beauty, the air, "the view, makes amends for the expence, which "is very great in finishing and supporting the "terrace-walks, in levelling the parterres, and in "the stone stairs that are necessary from one to "the other.

"THE perfectest figure of a garden I ever saw,
"either at home or abroad, was that of Moor-
"park in Hertfordshire, when I knew it about
"thirty years ago. It was made by the Countess
"of Bedford, esteemed among the greatest wits of
"her time, and celebrated by Doctor Donne;
"and with very great care, excellent contrivance,
"and much cost; but greater sums may be
"thrown away without effect or honour, if there
"want sense in proportion to money, or *if nature*
"*be not followed*, which I take to be the great rule
"in this, and perhaps in every thing else, as far
"as the conduct not only of our lives but our
"governments."

[‘WE shall see how *natural* that admired gar-
‘den was.’]

"BECAUSE I take* the garden I have named to
"have been in all kinds the most beautiful and
"perfect, at least in the figure and disposition, that
"I have ever seen, I will describe it for a model
"to those that meet with such a situation, and are
"above the regards of common expence. It lies
"on the side of a hill, upon which the house stands,

* ‘This garden seems to have been made after the plan
‘laid down by Lord Bacon in his 46th Essay, to which, that
‘I may not multiply quotations, I will refer the reader.’

" but not very steep. The length of the house, " where the best rooms and of most use or plea- " sure are, lies upon the breadth of the garden; " the great parlour opens into the middle of a " terrace gravel walk that lies even with it, and " which may lie, as I remember, about three " hundred paces long, and broad in proportion; " the border set with standard laurels and at large " distances, which have the beauty of orange trees " out of flower and fruit. From this walk are " three descents by many stone steps, in the middle " and at each end, into a very large parterre. " This is divided into quarters by gravel-walks, " and adorned with two fountains and eight statues " in the several quarters. At the end of the terras- " walk are two summer-houses, and the sides of " the parterre are ranged with two large cloisters " open to the garden, upon arches of stone, and " ending with two other summer-houses even " with the cloisters, which are paved with stone, " and designed for walks of shade, there being " none other in the whole parterre. Over these " two cloisters are two terraces covered with lead " and fenced with balusters; and the passage into " these airy walks is out of the two summer-houses " at the end of the first terrace-walk. The cloister " facing the south is covered with vines, and " would have been proper for an orange-house, " and the other for myrtles or other more common

" greens, and had, I doubt not, been cast for that
" purpose, if this piece of gardening had been then
" in as much vogue as it is now.

" FROM the middle of this parterre is a descent
" by many steps flying on each side of a grotto
" that lies between them, covered with lead and
" flat, into the lower garden, which is all fruit-
" trees ranged about the several quarters of a wil-
" derness which is very shady; the walks here are
" all green, the grotto embellished with figures of
" shell rock-work, fountains, and water-works.
" If the hill had not ended with the lower garden,
" and the wall were not bounded by a common
" way that goes through the park, they might have
" added a third quarter of all greens; but this
" want is supplied by a garden on the other side
" the house, which is all of that sort, very wild,
" shady, and adorned with rough rock-work and
" fountains.

" THIS was Moor-park when I was acquainted
" with it, and the sweetest place, I think, that I
" have seen in my life, either before or since, at
" home or abroad."—

'I WILL make no farther remarks on this de-
'scription. Any man might design and *build* as
'sweet a garden, who had been born in and never

'stirred out of Holborn. It was not peculiar to 'Sir William Temple to think in that manner. 'How many Frenchmen are there who have seen '*our* gardens, and still prefer *natural* flights of 'steps and shady cloisters covered with lead! Le 'Nautre, the architect of the groves and grottos 'at Versailles, came hither on a mission to im-'prove our taste. He planted St. James's and 'Greenwich Parks—no great monuments of his 'invention.

'To do farther justice to Sir William Temple, 'I must not omit what he adds. "What I have "said of the best forms of gardens, is meant only of "such as are in some sort regular; for there may "be other forms wholly irregular, that may, for "aught I know, have more beauty than any of the "others; but they must owe it to some extraordi-"nary dispositions of nature in the seat, or some "great race of fancy or judgement in the contri-"vance, which may reduce many disagreeing parts "into some figure, which shall yet, upon the whole, "be very agreeable. Something of this I have "seen in some places, but heard more of it from "others, who have lived much among the Chinese, "a people whose way of thinking seems to lie as "wide of ours in Europe as their country does. "Their greatest reach of imagination is employed "in contriving figures, where the beauty shall be

"great and strike the eye, but without any order
" or disposition of parts, that shall be commonly
" or easily observed. And though we have hardly
" any notion of this sort of beauty, yet they have a
" particular word to express it; and where they
" find it hit their eye at first sight, they say the
" Sharawadgi is fine or is admirable, or any such
" expression of esteem:—but I should hardly
" advise any of these attempts in the figure of
" gardens among us: they are adventures of too
" hard atchievement for any common hands;
" and though there may be more honour if they
" succeed well, yet there is more dishonour, if they
" fail, and it is twenty to one they will; whereas
" in regular figures, it is hard to make any great
" and remarkable faults."

'FORTUNATELY Kent and a few others were
' not quite so timid, or we might still be going up
' and down stairs in the open air.

'It is true, we have heard much lately, as Sir
' William Temple did, of irregularity and imi-
' tations of nature in the gardens or grounds of the
' Chinese. The former is certainly true: they are
' as whimsically irregular as European gardens are
' formally uniform, and unvaried: but, with re-
' gard to nature, it seems as much avoided, as in
' the squares and oblongs, and straight lines of our

'ancestors. An artificial perpendicular rock, 'starting out of a flat plain, and connected with 'nothing, often pierced through in various places, 'with oval hollows, has no more pretension to be 'deemed natural, than a lineal terrace, or a par-'terre. The late Mr. Joseph Spence, who had 'both taste and zeal for the present style, was so 'persuaded of the Chinese Emperor's pleasure-'ground being laid out on principles resembling 'ours, that he translated and published, under the 'name of Sir Harry Beaumont, a particular account 'of that inclosure from the Collection of the Letters 'of the Jesuits. I have looked it over, and, except 'a determined irregularity, can find nothing in it 'that gives me any idea of attention being paid to 'nature. It is of vast circumference, and contains '200 palaces, besides as many contiguous for the 'eunuchs, all gilt, painted, and varnished. There 'are raised hills from 20 to 60 feet high, streams 'and lakes, and one of the latter five miles round. 'These waters are passed by bridges:—but even 'their bridges must not be straight—they serpen-'tine as much as the rivulets, and are sometimes 'so long as to be furnished with resting places, 'and begin and end with triumphal arches. Me-'thinks a straight canal is as rational at least as a 'meandering bridge. The colonades undulate in 'the same manner. In short, this pretty gaudy 'scene is the work of caprice and whim, and,

'when we reflect on their buildings, presents no 'image but that of unsubstantial tawdriness. Nor 'is this all. Within this fantastic Paradise is a 'square town, each side a mile long. Here the 'eunuchs of the Court, to entertain his Imperial 'Majesty with the bustle and business of the capital in which he resides, but which it is not of 'his dignity ever to see, act merchants and all 'sorts of trades, and even designedly exercise for 'his royal amusement every art of knavery that 'is practised under his auspicious government. 'Methinks, this is the childish solace and repose 'of grandeur, not a retirement from affairs to the 'delights of rural life. Here, too, his Majesty 'plays at agriculture : there is a quarter set apart 'for that purpose : the eunuchs sow, reap, and 'carry in their harvest, in the imperial presence : 'and his Majesty returns to Pekin, persuaded 'that he has been in the country.

'* The French have, of late years, adopted our style in 'gardens, but, chusing to be fundamentally obliged to more 'remote rivals, they deny us half the merit, or rather the originality of the invention, by ascribing the discovery to the 'Chinese, and by calling our taste in gardening *le gout* '*Anglo-Chinois*. I think I have shewn that this is a blunder, 'and that the Chinese have passed to one extremity of absurdity, as the French, and all antiquity, had advanced to the 'other, both being equally remote from nature ; regular 'formality is the opposite point to fantastic Sharawadgis. 'The French, indeed, during the fashionable paroxysm of

'HAVING thus cleared my way by ascertaining 'what have been the ideas on gardening in all 'ages, as far as we have materials to judge by, it 'remains to shew to what degree Mr. Kent in- 'vented the new style, and what hints he had re- 'ceived to suggest and conduct his undertaking.

'philosophy, have surpassed us, at least in meditation on the 'art. I have perused a grave treatise of recent date, in which 'the author, extending his views beyond mere luxury and 'amusement, has endeavoured to inspire his countrymen, 'even in the gratification of their expensive pleasures, with 'benevolent projects. He proposes to them to combine gar- 'dening with charity, and to make every step of their walks 'an act of generosity, and a lesson of morality. Instead of 'adorning favourite points with a heathen temple, a Chinese 'pagoda, a Gothic tower, or fictitious bridge, he proposes to 'them at the first resting place to erect a school, a little far- 'ther, to found an academy, at a third distance a manufacture, 'and at the termination of the park, to endow an hospital. 'Thus, says he, the proprietor would be led to meditate, as 'he saunters, on the different stages of human life, and both 'his expence and thoughts would march in a progression of 'patriotic acts and reflections. When he was laying out so 'magnificent, charitable, and philosophic an Utopian villa, 'it would have cost no more to have added a Foundling hos- 'pital, a Senate-house, and a burying-ground. If I smile at 'such visions, still one must be glad, that in the whirl of 'fashions, beneficence should have its turn in vogue; and 'though the French treat the Virtues like every thing else. 'but as an object of mode, it is to be hoped that they too 'will, every now and then, come into fashion again. The 'author I have been mentioning reminds me of a French

'WE have seen what Moor-park was, when pro-
'nounced a standard. But as no succeeding gene-
'ration in an opulent and luxurious country con-
'tents itself with the perfection established by its
'ancestors, more perfect perfection was still sought;
'and improvements had gone on, till London
'and Wise had stocked our gardens with giants,
'animals, monsters*, coats of arms, and mottos,
'in yew, box, and holly. Absurdity could
'go no farther, and the tide turned. Bridgman,

'Gentleman, who, some years ago, made me a visit at Straw-
'berry Hill He was so complaisant as to commend the
'place, and to approve our taste in gardens—but in the same
'style of thinking with the above-cited author, he said, "I
"do not like your imaginary temples and fictitious termina-
"tions of views: I would have real points of view with mov-
"ing objects; for instance, here I would have—(I forget
"what)—and there a watering place." "That is not so
"easy (I replied); one cannot oblige others to assemble at
"such or such a spot for one's amusement—however, I am
"glad you would like a watering-place, for *there* happens to
"be one: in that creek of the Thames, the inhabitants of
"the village do actually water their horses: but I doubt
"whether, if it were not *convenient* to them to do so, they
"would frequent the spot only to enliven my prospect."—
'Such Gallo-Chinois gardens, I apprehend, will rarely be
'executed.'

'* On the piers of a garden gate not far from Paris I ob-
'served two very coquet sphinxes. These lady monsters had
'straw hats gracefully smart on one side of their heads,
'and silken cloaks half veiling their necks; all executed in
'stone.'

'the next fashionable designer of gardens, was 'far more chaste; and whether from good sense, 'or that the Nation had been struck and re-'formed by the admirable paper in The Guar-'dian, No. 173, he banished verdant sculpture, 'and did not even revert to the square precision 'of the foregoing age. He enlarged his plans, 'disdained to make every division tally to its 'opposite, and though he still adhered much to 'straight walks with high clipped hedges, they 'were only his great lines; the rest he diversified 'by wilderness, and with loose groves of oak, 'though still within surrounding hedges. I have 'observed in the garden* at Gubbins in Hertford-'shire many detached thoughts, that strongly 'indicate the dawn of modern taste. As his re-'formation gained footing, he ventured farther, 'and in the royal garden at Richmond dared to 'introduce cultivated fields, and even morsels of 'a forest appearance, by the sides of those endless 'and tiresome walks, that stretched out of one into 'another without intermission. But this was not

'* The seat of the late Sir Jeremy Sambroke. It had 'formerly belonged to Lady More, mother-in-law of Sir 'Thomas More, and had been tyrannically wrenched from 'her by Henry VIII. on the execution of Sir Thomas, though 'not her son, and though her jointure from a former hus-'band.'

'till other innovators had broke loose too from 'rigid symmetry.

'BUT the capital stroke, the leading step to all 'that has followed, was [I believe the first thought 'was Bridgman's] the destruction of walls for 'boundaries, and the invention of fossés—an at-'tempt then deemed so astonishing, that the com-'mon people called them Ha! Ha's! to express 'their surprize at finding a sudden and unper-'ceived check to their walk.

'ONE of the first gardens planted in this simple 'though still formal style, was my father's at 'Houghton. It was laid out by Mr. Eyre, an 'imitator of Bridgman. It contains three-and-'twenty acres, then reckoned a considerable 'portion.

'I CALL a sunk fence the leading step, for these 'reasons. No sooner was this simple enchantment 'made, than levelling, mowing, and rolling, fol-'lowed. The contiguous ground of the park 'without the sunk fence was to be harmonized 'with the lawn within; and the garden in its turn 'was to be set free from its prim regularity, that 'it might assort with the wilder country without. 'The sunk fence ascertained the specific garden, 'but that it might not draw too obvious a line of

'distinction between the neat and the rude, the 'contiguous out-lying parts came to be included 'in a kind of general design; and when nature was 'taken into the plan, under improvements, every 'step that was made, pointed out new beauties and 'inspired new ideas. At that moment appeared 'Kent, painter enough to taste the charms of land-'scape, bold and opiniative enough to dare and to 'dictate, and born with a genius to strike out a 'great system from the twilight of imperfect essays. 'He leaped the fence, and saw that all nature was 'a garden. He felt the delicious contrast of hill and 'valley changing imperceptibly into each other, 'tasted the beauty of the gentle swell or concave 'scoop, and remarked how loose groves crowned 'an easy eminence with happy ornament, and 'while they called in the distant view between 'their graceful stems, removed and extended the 'perspective by delusive comparison.

'THUS the pencil of his imagination bestowed 'all the arts of landscape on the scenes he handled. 'The great principles on which he worked were 'perspective, and light and shade. Groupes of 'trees broke too uniform or too extensive a lawn; 'evergreens and woods were opposed to the glare 'of the champaign; and where the view was less 'fortunate, or so much exposed as to be beheld at 'once, he blotted out some parts by thick shades,

'to divide it into variety, or to make the richest 'scene more enchanting by reserving it to a far'ther advance of the spectator's step. Thus, se'lecting favourite objects, and veiling deformities 'by screens of plantation; sometimes allowing the 'rudest waste to add its foil to the richest theatre; 'he realized the compositions of the greatest mas'ters in painting. Where objects were wanting 'to animate his horizon, his taste as an archi'tect could bestow immediate termination. His 'buildings, his seats, his temples, were more the 'works of his pencil than of his compasses. We 'owe the restoration of Greece and the diffusion 'of architecture to his skill in landscape.

'BUT of all the beauties he added to the face of 'this beautiful country, none surpassed his ma'nagement of water. Adieu to canals, circular 'basons, and cascades tumbling down marble steps, 'that last absurd magnificence of Italian and 'French villas. The forced elevation of cataracts 'was no more. The gentle stream was taught to 'serpentize seemingly at its pleasure, and where 'discontinued by different levels, its course ap'peared to be concealed by thickets properly 'interspersed, and glittered again at a distance 'where it might be supposed naturally to arrive. 'Its borders were smoothed, but preserved their 'waving irregularity. A few trees scattered here

'and there on its edges sprinkled the tame bank 'that accompanied its meanders; and when it 'disappeared among the hills, shades descending 'from the heights leaned towards its progress, 'and framed the distant point of light under 'which it was lost, as it turned aside to either 'hand of the blue horizon.

'THUS, dealing in none but the colours of na-'ture, and catching its most favourable features, 'men saw a new creation opening before their eyes. 'The living landscape was chastened or polished, 'not transformed. Freedom was given to the 'forms of trees; they extended their branches 'unrestricted, and where any eminent Oak, or 'master Beech, had escaped maiming and surviv-'ed the forest, bush and bramble was removed, and 'all its honours were restored to distinguish and 'shade the plain. Where the united plumage of 'an ancient wood extended wide its undulating 'canopy, and stood venerable in its darkness, 'Kent thinned the foremost ranks, and left but so 'many detached and scattered trees, as softened 'the approach of gloom, and blended a chequered 'light with the thus lengthened shadows of the 'remaining columns.

'SUCCEEDING artists have added new master-'strokes to these touches: perhaps improved or

'brought to perfection some that I have named. 'The introduction of foreign trees and plants, 'which we owe principally to Archibald Duke of 'Argyle, contributed essentially to the richness of 'colouring so peculiar to our modern landscape. 'The mixture of various greens, the contrast of 'forms between our forest trees and the northern 'and West Indian firs and pines, are improve-'ments more recent than Kent, or but little known 'to him. The weeping Willow and every florid 'shrub, each tree of delicate or bold leaf, are new 'tints in the composition of our gardens. The 'last century was certainly acquainted with many 'of those rare plants we now admire. The Wey-'mouth pine has long been naturalized here; the 'patriarch plant still exists at Longleat. The 'light and graceful Acacia was known as early; 'witness those ancient stems in the court of Bed-'ford house in Bloomsbury-square; and in the 'Bishop of London's garden at Fulham are many 'exotics of very antient date. I doubt therefore 'whether the difficulty of preserving them in a 'clime so foreign to their nature did not convince 'our ancestors of their inutility in general; unless 'the shapeliness of the lime and horse chesnut, 'which accorded so well with established regu-'larity, and which thence and from their novelty 'grew in fashion, did not occasion the neglect of 'the more curious plants.

'BUT just as the encomiums are that I have 'bestowed on Kent's discoveries, he was neither 'without assistance or faults. Mr. Pope un-'doubtedly contributed to form his taste. The 'design of the Prince of Wales's garden at Carlton 'house was evidently borrowed from the Poet's 'at Twickenham. There was a little of affected 'modesty in the latter, when he said, of all his 'works he was most proud of his garden. And 'yet it was a singular effort of art and taste to im-'press so much variety and scenery on a spot of 'five acres. The passing through the gloom from 'the grotto to the opening day, the retiring and 'again assembling shades, the dusky groves, the 'larger lawn, and the solemnity of the termination 'at the cypresses that lead up to his mother's 'tomb, are managed with exquisite judgement; 'and though Lord Peterborough assisted him

'To form his quincunx and to rank his vines,

'those were not the most pleasing ingredients of 'his little perspective.

'I DO not know whether the disposition of the 'garden at Rousham, laid out for General Dor-'mer, and in my opinion the most engaging of all 'Kent's works, was not planned on the model of 'Mr. Pope's, at least in the opening and retiring 'shades of Venus's Vale. The whole is as elegant

'and antique as if the Emperor Julian had selected 'the most pleasing solitude about Daphne to en- 'enjoy a philosophic retirement.

'THAT Kent's ideas were but rarely great, was 'in some measure owing to the novelty of his art. 'It would have been difficult to have transported 'the style of gardening at once from a few acres to 'tumbling of forests: and though new fashions 'like new religions, [which are new fashions] often 'lead men to the most opposite excesses, it could 'not be the case in gardening, where the experi- 'ments would have been so expensive. Yet it is 'true too that the features in Kent's landscapes 'were seldom majestic. His clumps were puny, 'he aimed at immediate effect, and planted not for 'futurity. One sees no large woods sketched out 'by his direction. Nor are we yet entirely risen 'above a too great frequency of small clumps, es- 'pecially in the elbows of serpentine rivers. How 'common to see three or four beeches, then as 'many larches, a third knot of cypresses, and a 'revolution of all three! Kent's last designs were 'in a higher style, as his ideas opened on success. 'The north terrace at Claremont was much su- 'perior to the rest of the garden.

'A RETURN of some particular thoughts was 'common to him with other painters, and made

'his hand known. A small lake edged by a 'winding bank with scattered trees that led to a 'seat at the head of the pond, was common to 'Claremont, Esher, and others of his designs. At 'Esher,

'Where Kent and Nature vied for Pelham's love,

'the prospects more than aided the Painter's ge-'nius—they marked out the points where his art 'was necessary or not; but thence left his judge-'ment in possession of all its glory.

'HAVING routed professed art, for the modern 'gardener exerts his talents to conceal his art, 'Kent, like other reformers, knew not how to 'stop at the just limits. He had followed Nature, 'and imitated her so happily, that he began to 'think all her works were equally proper for imi-'tation. In Kensington garden he planted dead 'trees, to give a greater air of truth to the scene '—but he was soon laughed out of this excess. 'His ruling principle was, that Nature abhors a 'straight line. His mimics, for every genius has 'his apes, seemed to think that she could love 'nothing but what was crooked. Yet so many men 'of taste of all ranks devoted themselves to the new 'improvements, that it is surprizing how much 'beauty has been struck out, with how few absur-'dities. Still in some lights the reformation seems

'to me to have been pushed too far. Though an 'avenue crossing a park or separating a lawn, and 'intercepting views from the seat to which it 'leads, are capital faults, yet a great avenue* 'cut through woods, perhaps before entering a 'park, has a noble air, and

Like footmen running before coaches
To tell the inn what Lord approaches,

'announces the habitation of some man of dis- 'tinction. In other places the total banishment 'of all particular neatness immediately about a 'house, which is frequently left gazing by itself 'in the middle of a park, is a defect. Sheltered 'and even close walks in so very uncertain a cli- 'mate as ours, are comforts ill exchanged for the 'few picturesque days that we enjoy: and when- 'ever a family can purloin a warm and even some- 'thing of an old-fashioned garden from the land- 'scape designed for them by the undertaker in 'fashion, without interfering with the picture,

'* Of this kind one of the most noble is that of Stanstead, 'the seat of the Earl of Halifax, traversing an antient wood 'for two miles and bounded by the sea. The very extensive 'lawns at that seat, richly inclosed by venerable beech woods, 'and chequered by single beeches of vast size, particularly 'when you stand in the portico of the temple, and survey the 'landscape that wastes itself in rivers of broken sea, recall 'such exact pictures of Claud Lorrain, that it is difficult to 'conceive that he did not paint them from this very spot.'

'they will find satisfactions on those days that do 'not invite strangers to come and see their im-'provements.

'FOUNTAINS have with great reason been ba-'nished from gardens as unnatural; but it sur-'prises me that they have not been allotted to their 'proper positions, to cities, towns, and the courts 'of great houses, as proper accompaniments to 'architecture, and as works of grandeur in them-'selves. Their decorations admit the utmost in-'vention, and when the waters are thrown up to 'different stages, and tumble over their border, 'nothing has a more imposing or a more refresh-'ing sound. A palace demands its external graces 'and attributes, as much as a garden. Fountains 'and cypresses peculiarly become buildings, and 'no man can have been at Rome, and seen 'the vast basons of marble dashed with perpetual 'cascades in the area of St. Peter's, without re-'taining an idea of taste and splendor. Those in 'the Piazza Navona are as useful as sublimely 'conceived.

'GROTTOS in this climate are recesses only to 'be looked at transiently. When they are regu-'larly composed within of symmetry and archi-'tecture, as in Italy, they are only splendid im-'proprieties. The most judiciously, indeed most

'fortunately, placed grotto is that at Stourhead, 'where the river bursts from the urn of its god, 'and passes on its course through the cave.

'BUT it is not my business to lay down rules for 'gardens, but to give the history of them. A 'system of rules pushed to a great degree of refine- 'ment, and collected from the best examples and 'practice, has been lately given in a book intituled, 'Observations on Modern Gardening. The work 'is very ingeniously and carefully executed, and 'in point of utility rather exceeds than omits any 'necessary directions. The author will excuse me 'if I think it a little excess, when he examines that 'rude and unappropriated scene of Matlock-bath, 'and criticises Nature for having bestowed on the 'rapid river Derwent too many cascades. How 'can this censure be brought home to gardening? 'The management of rocks is a province can fall 'to few directors of gardens; still in our distant 'provinces such a guide may be necessary.

'THE author divides his subject into gardens, 'parks, farms, and ridings. I do not mean to 'find fault with this division. Directions are re- 'quisite to each kind, and each has its department 'at many of the great scenes from whence he drew 'his observations. In the historic light, I distin- 'guish them into the garden that connects itself

'with a park, into the ornamented farm, and into 'the forest or savage garden. Kent, as I have 'shewn, invented or established the first sort. 'Mr. Philip Southcote founded the second or *ferme* '*ornée**, of which is a very just description in the 'author I have been quoting. The third, I think, 'he has not enough distinguished. I mean that 'kind of alpine scene, composed almost wholly of 'pines and firs, a few birch, and such trees as 'assimilate with a savage and mountainous coun-'try. Mr. Charles Hamilton, at Pain's-hill, in my 'opinion, has given a perfect example of this mode 'in the utmost boundary of his garden. All is 'great, and foreign, and rude; the walks seem 'not designed, but cut through the wood of pines; 'and the style of the whole is so grand, and con-'ducted with so serious an air of wild and uncul-'tivated extent, that when you look down on this 'seeming forest, you are amazed to find it contain 'a very few acres. In general, except as a screen 'to conceal some deformity, or as a shelter in win-'ter, I am not fond of total plantations of ever-'greens. Firs in particular form a very ungrace-'ful summit, all broken into angles.

'SIR HENRY ENGLEFIELD was one of the first 'improvers on the new style, and selected with 'singular taste that chief beauty of all gardens,

* At Woburn Farm in Surry.

'prospect and fortunate points of view: we tire of 'all the painter's art, when it wants these finishing touches. The fairest scenes, that depend on 'themselves alone, weary when often seen. The 'Doric portico, the Palladian bridge, the Gothic 'ruin, the Chinese pagoda, that surprize the 'stranger, soon lose their charms to their surfeited 'master. The lake that floats the valley is still 'more lifeless, and its Lord seldom enjoys his expence but when he shews it to a visitor. But 'the ornament whose merit soonest fades, is the 'hermitage or scene adapted to contemplation. 'It is almost comic to set aside a quarter of one's 'garden to be melancholy in. Prospect, animated 'prospect, is the theatre that will always be the 'most frequented. Prospects formerly were sacrificed to convenience and warmth. Thus Burleigh stands behind a hill, from the top of which 'it would command Stamford. Our ancestors, 'who resided the greatest part of the year at their 'seats, as others did two years together or more, 'had an eye to comfort first, before expence. 'Their vast mansions received and harboured all 'the younger branches, the dowagers and antient 'maiden aunts of the families, and other families 'visited them for a month together. The method 'of living is now totally changed, and yet the same 'superb palaces are still created, becoming a pompous solitude to the owner, and a transient entertainment to a few travellers.

'IF any incident abolishes or restrains the modern style of gardening, it will be this circumstance of solitariness. The greater the scene the more distant it is probably from the capital, in the neighbourhood of which land is too dear to admit considerable extent of property. Men tire of expence that is obvious to few spectators. Still there is a more imminent danger that threatens the present, as it has ever done all taste —I mean the pursuit of variety. A modern French writer has, in a very affected phrase, given a just account of this, I will call it, distemper. He says, *l'ennui du beau amene le gout du singulier*. The noble simplicity of the Augustan age was driven out by false taste. The gigantic, the puerile, the quaint, and at last the barbarous and the monkish, had each their successive admirers. Music has been improved, till it is a science of tricks and slight of hand: the sober greatness of Titian is lost, and painting, since Carlo Maratti, has little more relief than Indian paper. Borromini twisted* and curled architecture, as if it was subject to the change of fashions like a head of hair. If we once lose sight of the propriety of landscape in our gardens, we shall wander into all the fantastic Sharawadgis of the Chinese. We have discovered the point of perfection.

* 'In particular, he inverted the volutes of the Ionic order.'

'We have given the true model of gardening to the 'world: let other countries mimic or corrupt our 'taste; but let it reign here on its verdant throne, 'original by its elegant simplicity, and proud of 'no other art than that of softening Nature's harsh-'nesses, and copying her graceful touch.

'THE ingenious author of the Observations on 'Modern Gardening is, I think, too rigid when 'he condemns some deceptions, because they 'have been often used. If those deceptions, as a 'feigned steeple of a distant church, or an unreal 'bridge to disguise the termination of water, were 'intended only to surprize, they were indeed tricks 'that would not bear repetition; but being in-'tended to improve the landscape, are no more to 'be condemned because common, than they would 'be if employed by a painter in the composition 'of a picture. Ought one man's garden to be de-'prived of a happy object, because that object has 'been employed by another? The more we ex-'act novelty, the sooner our taste will be vitiated. 'Situations are everywhere so various, that there 'never can be a sameness, while the disposition of 'the ground is studied and followed, and every 'incident of view turned to advantage.

'IN the mean time, how rich, how gay, how 'picturesque the face of the country! The demo-

'lition of walls laying open each improvement, 'every journey is made through a succession of 'pictures; and even where taste is wanting in the 'spot improved, the general view is embellished 'by variety. If no relapse to barbarism, forma-'lity, and seclusion is made, what landscapes will 'dignify every quarter of our island, when the 'daily plantations that are making have attained 'venerable maturity! A specimen of what our 'gardens will be, may be seen at Petworth, where 'the portion of the park nearest the house has been 'allotted to the modern style. It is a garden of 'oaks two hundred years old. If there is a fault 'in so august a fragment of improved nature, it is, 'that the size of the trees are out of all proportion 'to the shrubs and accompaniments. In truth, 'shrubs should not only be reserved for particular 'spots and home delight, but are passed their 'beauty in less than twenty years.

'ENOUGH has been done to establish such a 'school of landscape, as cannot be found on the 'rest of the globe. If we have the seeds of a 'Claude or a Gaspar amongst us, he must come 'forth. If wood, water, groves, vallies, glades, 'can inspire or poet or painter, this is the country, 'this is the age to produce them. The flocks, 'the herds, that now are admitted into, now graze 'on the borders of our cultivated plains, are ready

'before the painter's eyes, and group themselves
'to animate his picture. One misfortune in truth
'there is, that throws a difficulty on the artist. A
'principal beauty in our gardens is the lawn and
'smoothness of turf: in a picture it becomes a
'dead and uniform spot, incapable of *chiaro scuro*,
'and to be broken insipidly by children, dogs,
'and other unmeaning figures.

'SINCE we have been familiarized to the study
'of landscape, we hear less of what delighted our
'sportsmen ancestors, *a fine open country*. Wilt-
'shire, Dorsetshire, and such ocean-like extents,
'were formerly preferred to the rich blue prospects
'of Kent, to the Thames-watered views in Berk-
'shire, and to the magnificent scale of Nature in
'Yorkshire. An open country is but a canvas on
'which a landscape might be designed.

'IT was fortunate for the country and Mr. Kent,
'that he was succeeded by a very able master;
'and did living artists come within my plan, I
'should be glad to do justice to Mr. Brown; but
'he may be a gainer, by being reserved for some
'abler pen.

'IN general, is is probably true, that the pos-
'sessor, if he has any taste, must be the best de-
'signer of his own improvements. He sees his

'situation in all seasons of the year, at all times of 'the day. He knows where beauty will not clash 'with convenience, and observes in his silent 'walks or accidental rides a thousand hints that 'must escape a person who in a few days sketches 'out a pretty picture, but has not had leisure to 'examine the details and relations of every part.

'TRUTH, which, after the opposition given to 'most revolutions, preponderates at last, will pro-'bably not carry our style of garden into general 'use on the continent. The expence is only 'suited to the opulence of a free country, where 'emulation reigns among many independent par-'ticulars. The keeping of our grounds is an 'obstacle, as well as the cost of the first formation. 'A flat-country, like Holland, is incapable of 'landscape. In France and Italy the nobility do 'not reside much, and make small expence, at 'their villas. I should think the little princes of 'Germany, who spare no profusion on their pa-'laces and country houses, most likely to be our 'imitators; especially as their country and climate 'bears, in many parts, resemblance to ours. In 'France, and still less in Italy, they could with 'difficulty attain that verdure which the humidity 'of our clime bestows as the ground-work of our 'improvements. As great an obstacle in France 'is the embargo laid on the growth of their trees,

'As, after a certain age, when they would rise to
'bulk, they are liable to be marked by the crown's
'surveyors as royal timber, it is a curiosity to see
'an old tree. A landscape and a crown-surveyor
'are incompatible.'

DIVISION THE SECOND.

PRINCIPLES OF THE RURAL ART.

SECTION THE FIRST.

GENERAL PRINCIPLES.

ARTS, merely imitative, have but one principle to work by, the *nature*, or actual state, of the thing to be imitated. In works of design and invention, another principle takes the lead, which is *taste*. And in every work, in which mental gratification is not the only object, a third principle arises, *utility*, or the concurrent purpose for which the production is intended.

THE RURAL ART is subject to these three principles: to nature, as being an imitative art; to utility, as being productive of objects, which are useful, as well as ornamental; and to taste, in the choice of fit objects to be imitated, and of fit pur-

poses to be pursued; as also in the composition of the several objects and ends proposed, so as to produce the degree of gratification and use, best suited to the *place*, and to the *purpose* for which it is about to be ornamented: thus, a Hunting Box and a Summer Villa,—an Ornamented Cottage and a Mansion, require a different *style* of ornament, a different *choice* of objects, a different *taste*. Nor can taste be confined to nature and utility,—the place and the purpose, alone; the object of the Polite Arts is the gratification of the human mind, and the state of refinement, of the mind itself, must be considered. Men's notions vary, not only in different ages, but individually in the same age: what would have gratified mankind, a century ago, in this country, will not please them now; while the Country Squire and the Fine Gentleman of the present day require a different kind of gratification; nevertheless, under these various circumstances, every thing may be *natural*, and every thing adapted to the *place*; the *degree of refinement* constituting the principal difference.

WE do not mean to enter into any argument, about whether a state of rusticity, or a state of refinement, whether the forest, or the city, be the state for which the Author of Nature intended the human species: mankind are now found in every state, and in every stage of savageness, rusticity,

civilization, and refinement; and the particular style of ornament we wish to recommend is, that which is best adapted to the state of refinement that now prevails in this country; leaving individuals to vary it, as their own peculiar taste may direct.

BEFORE we proceed farther, it may be necessary to explain what it is we mean, by *nature*, and *natural*. If, in the idea of *natural state*, we include *ground*, *water*, and *wood*, no spot in this island can be said to be in a *state of nature*. The *ground*, or the surface of the earth, as left by Nature (or the convulsions of Nature), remains, it is true, with but few alterations; yet, even here, (especially among rocks and steep acclivities, the noblest features in the face of Nature), we frequently find the hand of Art has been at work. Again, though rivers may still run in the channels, or nearly in the channels, into which Nature directed them; yet *waters*, taken generally, have been greatly controuled by human art. And, with respect to *wood*, we may venture to say, that there is not a tree, perhaps not a bush, now standing upon the face of the country, which owes its identical state of existence to Nature alone. Wherever cultivation has set its foot,—wherever the plow and spade have laid fallow the soil,—Nature is become extinct; and it is in neglected or less cultivated places, in morasses and mountains,

in forests and parochial wastes, we are to seek for anything *near* a state of Nature,—we mean in this country. And who would look for the standard of taste, who expect to find the lovely mixture of wood and lawn, so delightful to the human eye, in the endless woods of America? We may therefore conclude, that the objects of our imitation are not to be sought for in uncultivated Nature. The inhospitable heaths of Westmoreland may astonish for the moment, may be the pleasing amusement of a summer's day, and agreeable objects in their places; but are they *objects of imitation* under the window of a drawing room? Rather let us turn our eyes to well soiled, well wooded, well cultivated spots, where Nature and Art are happily blended; leaving those who are admirers of Art, merely imitative, to contemplate Nature on canvas; and those who wish for Nature, in a state of total neglect, to take up their residence in the woods of America.

FAR be it from us to rebel against the laws of Nature, or to question, in any wise, the perfection of the Deity. A state of nature, in the eye of Omniscience, is undoubtedly a state of perfection. But, in the littleness of human conception, something is wanted, to bring down natural objects to the level of human comprehension. What object in nature is in a state of *human perfection*? Even

in the finest woman, a female critic will discover *faults*: and, in the handsomest horse, a buyer will point out what, in the human eye, appear as *imperfections*. Did ever a landscape painter find a scene, purely natural, which might not have been improved by the hand of Art, or which he did not actually improve by a stroke of his pencil? A striking feature may sometimes be caught, where little addition is wanted; but in a rich picturable view, which will bear to be placed repeatedly under the eye, a portion of *lawn* is requisite*, and, in the wilds of nature, we know of no such thing.

* Mr. GRAY, whose letters to Dr. WARTON, describing the natural scenery of the North of England, have been held out as models of their kind, corroborates our idea.

'Just beyond this, opens one of the sweetest landscapes that 'art ever attempted to imitate. The bosom of the mountain 'spreading here into a broad bason, discovers in the midst 'Grasmere Water: its margin is hollowed into small bays, 'with bold eminences, some of rock, some of *soft turf*, that 'half conceal and vary the figure of the little lake they com-'mand: from the shore a low promontory pushes itself far into 'the water, and on it stands a white village, with the parish-'church rising in the midst of it: hanging inclosures, corn-'fields, and *meadows green as emerald*, with their trees, and 'hedges, and cattle, fill up the whole space from the edge of 'the water: and just opposite to you is a large farm-house, at 'the bottom of a steep *smooth lawn*, embosomed in old woods 'which climb half way up the mountain side, and discover

THEREFORE, our idea of *natural*, is not confined to *neglected* nature, but extends to *cultivated* nature, to nature *touched* by art, and rendered intelligible to human perception: and we venture to recommend, as objects most worthy the study and imitation of the artists, such *passages in nature*, as give the highest degree of gratification to cultivated minds in general: passages like the following—no matter whether produced by *accident* or *design*—no matter whether it occur in a forest or a park—or whether it occupy the corner of a common, or fill up a conspicuous quarter of an ornamented ground:—a lofty wood hanging on a bold ascent; its broken margin flowing negligently over the bosom of the valley lying broad and bare beneath, and falling gently to the brink of a river, winding gracefully along the base.——We further beg leave to add, in this place, that if a passage like this—especially if the vale be occupied by cattle, and the whole scene enlivened by the presence of the sun, and animated by the fleeting shadows of clouds, sweeping its varied surface—is incapable of conveying a degree of gratification to the mind

'above them a broken line of crags, that crown the scene. 'Not a single red tile, no flareing Gentleman's house, or garden walls, break in upon the repose of this little unsuspected 'paradise; but all is peace, rusticity, and happy poverty, in 'its neatest, most becoming attire.'

Gray's Letters to Dr. Warton, p. 181.

of any of our readers, we have no hope of entertaining such a mind, in this part of our performance.

SECTION THE SECOND.

THE SITE.

BY *the Site* we mean, not only the *place* itself, but likewise so much of the *surrounding country* as may fall immediately within the view, and unite with the near grounds.

IF the place be already suited to the surrounding country, and to the particular purpose for which it is intended, the assistance of art is not wanted, the business of the artist is precluded. If it be *nearly* in this state, the *touchings* of art are only required. But if the place be greatly deficient, as places in general are, then it is the duty of the artist "to supply its defects, to correct its faults, and to improve its beauties."

EVERY PLACE consists either of *ground* alone, or of *ground* and *water*, or of *ground* and *wood*, or of *ground*, *water*, and *wood*.

SECTION THE THIRD.

GROUND.

BY GROUND is meant, that portion of surface, which is included within the place to be improved; whether that surface be *swamp*, *lawn*, *roughet*, *broken ground*, or *rock*; and whether it be a *hill*, a *valley*, a *plain*, or a composition of *swells*, *dips*, and *levels*.

MR. GILPIN, in his excellent *Observations on the Wye, &c.* (page 62) gives an admirable description of what ground ought to be.—"Nothing," says he, "gives so just an idea of the beautiful swellings of ground, as those of water, where it has sufficient room to undulate and expand. In ground which is composed of very refractory materials, you are presented often with harsh lines, angular insertions, and disagreeable abruptnesses. In water, whether in gentle or in agitated motion, all is easy, all is softened into itself; and the hills and the vallies play into each other, in a variety of the most beautiful forms. In agitated water, abruptnesses indeed there are, but yet they are such

abruptnesses as, in some part or other, unite properly with the surface around them; and are on the whole peculiarly harmonious. Now, if the ocean in any of these swellings and agitations could be arrested and fixed, it would produce that pleasing variety, which we admire in ground. Hence, it is common to fetch our images from water, and apply them to land: we talk of an undulating line, a playing lawn, and a billowy surface; and give a much stronger and more adequate idea by such imagery, than plain language could possibly present."

THE exertions of art, however, are here inadequate, and the artist ought not to attempt to create a *mountain*, a *valley*, or a *plain*; and should but rarely meddle, even with the smaller inequalities of grounds. The *rock* stands equally above the reach of human art, and to attempt to make or unmake it is absurd. *Roughets* and *broken ground* may generally be reduced to lawn, or hid with wood; and a *swamp* may be drained, or covered with water; while *lawn* may be varied, at pleasure, with wood, and sometimes with water.

SECTION THE FOURTH.

WATER.

THIS is either *sea*, *lake*, *pool*, *river*, *rivulet*, or *rill*.

A BROAD *lake* and a copious *river* are too great for human art to cope with: nevertheless, the margin, and the bank, may be ornamented, and the surface of the water disclosed to advantage. *Rivulets* are often in themselves delightful, and, where broad waters are wanted, may be turned to great advantage by art. Stowe* affords a proof of what may be accomplished even with a *rill*. If the base of the valley be broad, a lake may be formed; if narrow, a river.

IN countries where natural waters abound, art may improve, but should not attempt to create: but in places naturally deficient in water, the artist may frequently call forth the creative powers with

* STOWE, the seat of the MARQUIS OF BUCKINGHAM, in Buckinghamshire.

success. In any situation, however, art must miscarry, if Nature has not furnished a sufficient supply of materials: *confined stagnant pools* are always disgusting: *stews*, indeed, may often be valuable: but, like the kitchen garden, they ought not to be *seen*.

SECTION THE FIFTH.

WOOD.

OVER this element of the rural art the power of the artist is absolute; he can increase or diminish at pleasure: if the place be over-wooded, he can lighten it with lawn, or with water: if too naked, he can supply the deficiency by PLANTING.

IN forming ORNAMENTAL PLANTATIONS, two things are to be considered, the *species of plantation*, and the *species of tree*.

THE different species of plantation are the *Wood*, the *Grove*, the *Coppice* or *Thicket*, the *Border* or *Skreen*, the *Mass*, *Clump*, or *Turf*, the *Group*, and the *Single Tree*.

WOODS, GROVES, and extensive THICKETS, are more particularly adapted to the sides of hills, and elevated situations: detached MASSES, GROUPS, and SINGLE TREES, to the lower grounds. A naked hill gives an idea of bleakness; as a valley filled with wood does that of dankness. The SHRUBERY depends more on the given accompaniments, than on its own natural situation.

MUCH depends upon the disposition of the several distinct woodinesses (whether accidental or designed) with respect to each other; and much also on the respective outlines, particularly those of the larger kind. The Atmosphere and the Earth are equally bountiful, in affording the rural artist fit subjects for study. The margins of seas and lakes give him, in their bays and promontories, an ample choice of outline; while the blue expanse, scattered with summer's clouds, discovers infinite variety, both of figure and disposition.

IN the choice of trees, four things are observable: the *height*, the *form*, the *colour*, and the *use*. *This* is more essential to a good choice, than may appear at first sight; nothing heightens the idea of ornament, especially in the eye of the owner, more than utility; nor, on the contrary, does any thing tend to throw a damp on the gratification, more than does the worthlessness of the object before us.

Immediately under the eye, the gaudy Shrub, and the ornamental though useless Exotic, may be admitted; but for more distant objects, and in less embellished situations, the Timber tree ought to prevail. We should endeavour to make such a choice, as will gratify the present age, and benefit the future.

IN mixing trees, there is, in respect of *height*, a general rule: the tallest should be made to occupy the central parts, descending gradually to the margin: but, with respect to *colour*, all precept, perhaps, would be vague; the tints ought to be as wild and various as evening clouds, tinged by the setting sun.

FOR farther remarks on this subject, see the following MINUTES IN PRACTICE.

SECTION THE SIXTH.

NATURAL ACCOMPANIMENTS.

THE most judicious mixture of wood and lawn appears dull and uninteresting, when unaccompanied by animated nature. What sprightliness

and elegance are added to the plain, in the playful attitudes and racings of the horse!—and how much additional grandeur the vale receives in the scattered herd!—How strikingly beautiful the bosom of a hill enlivened by the pasturing flock!—What gaiety is given to park scenery, in the airy action of the fawn;—and how peculiarly delightful the sequestered lawn, while the hare is present! Even the squirrel gives a chearfulness to the grove: while the plumy tribes disperse an agreeable animation through the whole scene.

SECTION THE SEVENTH.

FACTITIOUS ACCOMPANIMENTS.

UNDER this head, we arrange *Fences*, *Walks*, *Roads*, *Bridges*, *Seats*, and *Buildings*.

THE FENCE, where the place is large, becomes necessary: yet the eye dislikes constraint. Our ideas of liberty carry us beyond our species: the imagination feels a dislike in seeing even the brute creation in a state of confinement. Beside, a

tall fence frequently hides, from the sight, objects the most pleasing; not only the flocks and herds, but the surface they graze upon. These considerations have brought the *unseen fence* into general use.

THIS species of barrier, it must be allowed, incurs a degree of deception, which can scarcely be warranted, upon any other occasion. In this instance, however, it is a species of fraud which we observe in nature's practice: how often have we seen two distinct herds feeding, to appearance, in the same extended meadow; until coming abruptly upon a deep-sunk rivulet, or an unfordable river, we discover the deception.

BESIDES the *sunk* fence, another sort of unseen barrier may be made, though by no means equal to *that*; especially if near the eye. This is constructed of paling, painted of the *invisible green*. If the colour of the back ground were permanent, and that of the paint made exactly to correspond with it, the deception would, at a distance, be complete; but backgrounds, in general, changing with the season, this kind of fence is the less eligible.

MASSES and Tufts of woodiness, scattered promiscuously on either side of an unseen winding

fence, assist very much in doing away the idea of constraint. For by this means

> The wand'ring flocks that brouse between the shades,
> Seem oft to pass their bounds, the dubious eye
> Decides not if they crop the mead or lawn. MASON.

THE WALK, in extensive grounds, is as necessary as the Fence. The beauties of the place are disclosed that they may be seen; and it is the office of the walk to lead the eye from view to view; in order that, while the tone of health is preserved, by the favourite exercise of nature, the mind may be thrown into unison, by the harmony of the surrounding objects.

THE direction of the walk ought to be guided by the points of view to which it leads, and the nature of the ground it passes over: it ought to be made subservient to the natural impediments—the Ground, Wood, and Water—which fall in its way, without appearing to have any direction of its own. It can seldom, with propriety, run any distance, in a straight line; a thing which rarely occurs in a *natural walk*. The paths of the Negroes, and the Indians, are always crooked; and those of the brute creation are very similar. Mr. Mason's description of this *Path of Nature* is happily conceived.

> The peasant driving through each shadowy lane
> His team, that bends beneath th' incumbent weight

Of laughing CERES, marks it with his wheel;
At night and morn, the milk-maid's careless step
Has, thro' yon pasture green, from stile to stile
Impress a kindred curve; the scudding hare
Draws to her dew-sprent seat, o'er thymy heaths,
A path as gently waving.——— *Eng. Gard.* v. 60.

THE ROAD may be a thing of necessity, as an *approach* to the mansion, or a matter of amusement only, as a *drive* or a *ride*, from which the grounds, and the surrounding country, may be seen to advantage. It should be the study of the artist to make the same road answer, as far as may be, the two-fold purpose.

THE Road and the Walk are subject to the same rule of *Nature* and *Use*. The direction ought to be natural and easy, and adapted to the purpose intended. A Road of necessity ought to be straighter than one of mere conveniency: in this, recreation is the predominant idea; in that, utility. But, even in this, the direct line may be dispensed with. The natural roads upon heaths and open downs, and the grassy glades and green roads across forests and extensive wastes, are proper subjects to be studied.

THE BRIDGE should never be seen where it is not wanted: a useless bridge is a deception; deceptions are frauds; and fraud is always hateful;

unless when practised to avert some greater evil. A bridge without water is an absurdity; and half a one stuck up as an eye-trap is a paltry trick, which, though it may strike the stranger, cannot fail of disgusting, when the fraud is found out.

In low situations, and wherever water abounds, bridges become *useful*, and are therefore *pleasing objects*: they are looked for, and ought to appear; not as objects of ornament only, but likewise as matters of utility. The walk or the road, therefore, ought to be directed in such a manner, as to cross the water, at the point in which the bridge will appear to the greatest advantage.

In the construction of bridges, also, regard must be had to ornament and utility. A bridge is an artificial production, and as such it ought to appear. It ranks among the noblest of human inventions: the ship and the fortress alone excel it. Simplicity and firmness are the leading principles in its construction. Mr. Wheatley's observation is just when he says, "The single wooden arch, now much in fashion, seems to me generally misapplied. Elevated without occasion so much above, it is totally detached from the river; it is often seen straddling in the air, without a glimpse of water to account for it; and the ostentation of it, as an

ornamental object, diverts all that train of ideas, which its use, as a communication, might suggest." (*Obs. on Mod. Gard.* 73.) But we beg leave to differ from this ingenious Writer when he tells us that it is "spoiled, if adorned; it is disfigured, if only painted of any other than a dusky colour." In a rustic scene, where Nature wears her own coarse garb, "the vulgar foot bridge of planks only, guarded on one hand by a common rail, and supported by a few ordinary piles," may be in character; but amidst a display of ornamented Nature, a contrivance of that kind would appear mean and paltry; and would be an affectation of simplicity, rather than the lovely attribute itself. In cultivated scenes, the bridge ought to receive the ornaments which the laws of architectural taste allow; and the more polished the situation, the higher should be the style and finishings.

SEATS have a two-fold use; they are useful as places of rest and conversation, and as guides to the *points of view*, in which the beauties of the surrounding scene are disclosed. Every point of view should be marked with a seat, and, speaking generally, no seat ought to appear, but in some favourable point of view. This rule may not be invariable, but it ought seldom to be deviated from.

In the ruder scenes of neglected Nature, the simple trunk, rough from the woodman's hands, and the butts or stools of rooted trees, without any other marks of tools upon them, than those of the saw which severed them from their stems, are seats in character; and, in romantic or recluse situations, the cave or the grotto are admissible. But wherever human design has been executed, upon the natural objects of the place, the seat and every other artificial accompaniment ought to be in unison; and whether the bench or the alcove be chosen, it ought to be formed and finished, in such a manner, as to unite with the wood, the lawn, and the walk, which lie round it.

The colour of seats should likewise be suited to situations: where uncultivated Nature prevails, the natural brown of the wood itself ought not to be altered: but, where the rural art presides, white, or rather stone colour, has a much better effect.

Buildings may be admitted into ornamented Nature; provided they be at once useful and ornamental. Mere ornament without use, and mere use without ornament, are equally inadmissible. Nor should their uses be disguised; a barn dressed up in the habit of a country church, or a farm-house figuring away in the fierceness of a castle, are ridiculous deceptions. A landscape daubed

upon a board, and a painted steeple stuck up in a wood, are beneath censure.

THERE is another species of useless ornament, still more offensive, because more costly, than those comparatively innocent eye-traps; we mean TEMPLES. Whether they be dedicated to Bacchus, Venus, Priapus, or any other god or goddess of debauchery, they are, in this age, enlightened with regard to theological and scientific knowledge, equally absurd.

WE are far, however, from wishing to exclude architecture from ornamented Nature. We wish to see it exercised, in all its beauty and sublimity, upon a CHAPEL*, a MAUSOLEUM†, a MONUMENT‡, —scattered judiciously among the natural orna-

* The late Sir William Harbord, whose taste and judgement, upon every occasion, discovered a goodness of heart and a greatness of character, has given us a model of this kind, at Gunton, in Norfolk. The parish church, standing in his park, and being an old unsightly building, he had it taken down, and a *beautiful temple*, under the direction of the Adams', erected upon its site.

† The mausoleum at Castle-Howard, in Yorkshire, the seat of the Earl of Carlisle, is a noble structure.

‡ The *temple* of Concord and Victory at Stowe, erected to the memory of the great Lord Chatham, is a beautiful *monumental* building.

ments: not too open or conspicuous, to give them the air of principals; nor too recluse, to lose their full effect, as subordinate parts of the whole.

IN extensive grounds, RETREATS, more especially in the remoter parts, are in a degree requisite; and, if they be *seen*, they ought to harmonize with the views in which they appear; and, of course, the more polished the scene, the more ornamental should be the Retreat,—whether it be the *Room*, the *Portico*, or the more simple *Alcove*.

IN scenes less ornamented, buildings of an economical nature may appear, with good effect. Sir George Warren, at his seat near Fetcham in Surrey, has turned a *temple* into a windmill, with great success. What was before a useless pile of masonry, now stands an emblem of activity and industry. Under the heads of large artificial lakes, water mills may generally be erected, and with good effect. A corn mill, under proper regulations, and honest management, were ever a blessing to the poor in its neighbourhood. Substantial farm-houses, and neat comfortable cottages, scattered at a proper distance, are always pleasing objects. The retreat and the porter's lodge, being more susceptible of ornament, may be permitted nearer the eye.

DIVISION THE THIRD.

APPLICATION OF THE RURAL ART.

SECTION THE FIRST.

GENERAL APPLICATION.

HAVING thus enumerated the elements, and set forth the leading principles, of the art, we now proceed to the execution.

WE beg leave to preface this part of our performance with apprizing our Readers, that all which can be written upon this delightful art, must be more or less general.—All that *science* can do, is to give *a comprehensive view of the subject*; and all that *precept* should attempt, is to lay down *general rules* of practice. The nature of the place itself—and the purpose for which it is about to be improved, must ever determine the

particular application. It follows, that a gentleman who, from long residence, is fully acquainted with the former, and whose will is a rule to the latter, is the properest person to improve his own place;—provided he be intimately acquainted with the *Art*—as well as with the *place* and the *purpose:* the three are equally and essentially necessary to be understood. It would be as great an impropriety, in a gentleman, to set about the execution of a work of this nature, upon a large scale, before he had acquired a comprehensive knowledge of the subject, studied its leading principle from Nature, made ample observation upon places already ornamented, and had established his theory by some actual practice, at least upon a small scale, —as it would be, in a professional artist, to hazard his own reputation, and risque the property of his employer, before he had studied, maturely, the nature of the place, and had been made fully sensible of the intentions of its owner.

THE nature and style of improvement,—*the purpose*,—depends entirely upon the intention and will of the proprietor, and is, consequently, as various, as the nature of places themselves: nevertheless, improvements in general may be classed under the following heads:

THE HUNTING BOX,
THE ORNAMENTED COTTAGE,

THE VILLA, and
THE PRINCIPAL RESIDENCE.

BUT, before we enter upon the detail, it will be proper to make some general observations.

IT is unnecessary to repeat, that wherever Nature or accident, has already adapted the place to the intended purpose, the assistance of Art is precluded: but wherever Nature is improveable, Art has an undoubted right to step in, and make the requisite improvement. The diamond, in its natural state, is improveable by art.

IN the lower classes of rural improvements, Art should be seen as little as may be; and, in the more negligent scenes of Nature, every thing ought to appear, as if it had been done by the general laws of Nature, or had grown out of a series of fortuitous Events. But, in the higher departments, Art cannot be hid; and the *appearance* of design ought not to be excluded. A human production cannot be made perfectly natural; and, held out as such, it becomes an imposition. Our art lies in endeavouring to adapt the productions of Nature to human taste and perception; and, if much art be used, let us not *attempt* to hide it. Who considers an accomplished well dressed woman as in a state of Nature? and who, seeing a beautiful ground

adorned with wood and lawn, with water, bridges, and buildings, believes it to be a natural production? Art seldoms fails to please when executed in a masterly manner: nay, it is frequently the design and execution, more than the production itself, that strikes us. It is the *artifice*, not the *design*, which ought to be avoided. It is the *labour*, and not the *art*, which ought to be concealed. A well written poem would be read with less pleasure, if we *knew* the painful exertions it gave rise to in the composition; and the rural artist ought, upon every occasion, to endeavour to avoid labour; or, if indispensably necessary, to conceal it. No trace should be left to lead back the mind to the *expensive toil*. A mound raised, a mountain levelled, or a useless temple built, convey to the mind feelings equally disgusting.

BUT though the aids of Art are as essential to Rural Ornament, as education is to manners; yet Art may do too much: she ought to be considered as the handmaid, not as the mistress, of Nature: and whether she be employed in carving a tree into the figure of an animal, or in shaping a view into the form of a *picture*, she is equally culpable. The nature of the place is sacred. Should this tend to *landscape*, from some principal point of view, assist Nature, and perfect it; provided this can be done without injuring the views from other

points. But do not disfigure the natural features of the place;—do not sacrifice its native beauties to the arbitrary laws of landscape painting.

> Great Nature scorns controul; she will not bear
> One beauty foreign to the spot or soil
> She gives thee to adorn: 'Tis thine alone
> To mend, not change her features. MASON.

IN a picture bounded by its frame, a perfect landscape is looked for: it is of itself a *whole*, and *the frame must be filled*. But it is not so in ornamented Nature: for, if a side-screen be wanting, the eye is not offended with the frame, or the wainscot; but has always some natural, and often pleasing object to receive it. Suppose a room to be hung with one continued rural representation,—would *distinct pictures* be expected? would correct landscapes be looked for? Nature scarcely knows the thing mankind call a *landscape*. The landscape painter seldom, if ever, finds it perfected to his hands;—some addition or alteration is almost always wanted. Every man, who has made his observations upon natural scenery, knows that the Misletoe of the Oak occurs almost as often as a perfectly natural landscape, and to attempt to make up artificial landscape, upon every occasion, is unnatural, and absurd.

IT is far from our intention to intimate any thing the least disrespectful to *landscape painting*: let the ingenious artist cull from Nature her choicest beauties, and let him associate them, in the manner best suited to his own single, and permanent point of view: but do not let us carry his production back again to Nature, and contract her unbounded beauties within the limits of a picture frame. If, indeed, the eye were fixed in one point, the trees could be raised to their full height at command, and the sun be made to stand still,—the rural artist might work by the rules of *light and shade*, and compose his landscape by the painter's law. But, while the sun continues to pour forth its light impartially, and the trees to rise with slow progression, it would be ridiculous to attempt it. Let him rather seek out, imitate, and associate, such STRIKING PASSAGES IN NATURE, as are immediately applicable to the place to be improved, without regard to rules of landscape, merely human;—and let him,

"————————————in this and all
Be various, wild, and free, as Nature's self." MASON.

Instead of sacrificing the natural beauties of the place to one formal landscape, let every step disclose fresh charms unsought for. How strikingly beautiful the changes formed by the islands, and their respective mountains, in sailing through the

West Indies! The eye does not catch the same view twice: the scene is ever changing, ever delightful.

We should not have offered our sentiments so freely upon landscape, had not a French writer of some eminence*, in a work lately published, laid it down as an invariable rule, that all ornamental grounds should have a complete landscape, to be seen from some part of the house; and to be made from a perspective drawing, previously taken from the window of the saloon, or the top of the mansion. The work, in other respects, has, nevertheless, great merit, and is in fact an ingenious *Essay on English Gardening*. The Author's vanity, however, will not suffer him to make this concession: no, it is neither ancient, nor modern, nor English, nor Chinese; and there is some reason to suspect, that the Marquis holds out landscape for no other purpose, than to endeavour to give his work the air of originality; for, in other respects, it contains, in effect, what Wheatley and Mason, Kent and Brown, have previously taught and practised.

* The Marquis D'Ermenonville, friend of the celebrated Rousseau, who died at his house, and whose remains were deposited in his grounds, at Ermenonville.

NOTWITHSTANDING, however, the nature of the place ought not to be sacrificed to the mansion;—the house must ever be allowed to be a principal in the composition. It ought to be considered as the center of the system; and the rays of art, like those of the sun, should grow fainter as they recede from the center. The house itself being entirely a work of art, its immediate environs should be highly finished; but as the distance increases, the appearance of design should gradually diminish, until Nature and fortuitousness have full possession of the scene.

IN general, the approach should be to the back-front, which, in suitable situations, ought to lie open to the park or pasture grounds. On the sides more highly ornamented, a well kept gravel walk may embrace the stonework; to this the polished lawn and shrubery succeed; next, the grounds closely pastured; and lastly, the surrounding country, which ought not to be considered as out of the artist's reach: for his art consists, not more in decorating particular spots, than in *endeavouring* to render the whole face of Nature delightful.

ANOTHER reason for this mode of arrangement is, objects immediately under the eye are seen more distinctly than those at a distance, and ought to be

such as are pleasing in the detail. The beauties of a flower can be discerned on a near view, only; while, at a distance, a roughet of coppice wood, and the most elegant arrangement of flowering shrubs, have the same effect. The most rational entertainment, the human mind is capable of receiving, is that of observing the operations of Nature. The foliation of a leaf, the blowing of flowers, and the maturation of fruit, are among the most delightful subjects that a contemplative mind can be employed in. These processes of Nature are slow, and except the object fall spontaneously under the eye of the observer, the inconveniencies of visiting it in a remote part, so far interfere with the more important employments of life, as to blunt, if not destroy, the enjoyment. This is a strong argument in favor of shrubs and flowers being planted under or near our windows, especially those from whence they may be viewed during the hours of leisure and tranquillity.

FURTHER, the vegetable creation being subject to the animal, the shrub may be cropped, or the flower trodden down, in its day of beauty. If, therefore, we wish to converse with Nature, in private, intruders must be kept off,—the shrubery be severed from the ground;—yet not in such a manner as to drive away the pasturing flock from our sight. For this reason, the polished lawn ought

not to be too extensive, and the fence, which incloses it should be such, as will not interrupt the view: But whether it be *seen* or *unseen*, *suspected* or *unsuspected*, is a matter of no great import: its utility in protecting the shrubs and flowers,—in keeping the horns of cattle from the window, and the feet of sheep from the gravel and broken ground,—in preserving that neatness on the outside, which ought to correspond with the finishings and furniture within,—render it of sufficient importance, to become even a part of the ornament.

BEFORE any step can be taken towards the execution of the design, be it large or small, a map or plan of the place, exactly as it lies in its unimproved state, should be made; with a corresponding sketch, to make the intended improvements upon. Not a hovel nor a twig should be touched, until the artist has studied maturely the natural abilities of the place, and has decidedly fixed in his mind, and finally settled on his plan, the proposed alterations: and even then, let him "dare with caution."

THERE is a striking similarity between a neglected scene in Nature, and a neglected cottage beauty; and the mode of improvement is, in either instance, similar. If the face unwashed, and uncombed hair, be considered as ornamental,—Art

is not wanted. If rustic bloom and native simplicity be deemed more desirable,—wash the face, and comb the hair in flowing ringlets, and such ornament will be had in its highest perfection. If that elegance of carriage, and gracefulness of deportment, which flow from education and a refined understanding, be thought requisite, Art may be employed in giving this grace and elegance; for thus far she may go with propriety. But, if she do more, she does too much.

It would be needless to add, that Art may be employed in concealing, or in doing away, the deformities of Nature. But, even in this, she ought to be cautiously circumspect: for, throughout, there is more danger of doing too much, than too little; and nothing should ever be attempted, which cannot be performed in a masterly manner.

SECTION THE SECOND.

HUNTING BOX.

HERE little is required of Art. Hunting may be called the amusement of Nature; and the place appropriated to it ought to be no farther altered, from its natural state, than decency and conve-

niency require:—With men who live in the present age of refinement, "a want of decency is a want of sense."

THE style throughout, should be *masculine*. If shrubs be required, they should be of the hardier sorts; the Box, the Holly, the Laurustinus. The trees should be the Oak and the Beech, which give, in Autumn, an agreeable variety of foliage, and anticipate, as it were, the season of diversion. A suite of paddocks should be seen from the house; and if a view of distant covers can be caught, the background will be compleat. The stable, the kennel, and the leaping bar, are the factitious accompaniments; in the construction of which simplicity, subtantialness, and conveniency, should prevail.

SECTION THE THIRD.

ORNAMENTED COTTAGE.

NEATNESS and simplicity ought to mark the style of this rational retreat. Ostentation and show should be cautiously avoided; even elegance should not be *attempted*; though it may not be *hid*, if it offer itself spotaneously.

NOTHING, however, should appear vulgar, nor should simplicity be pared down to baldness; every thing whimsical or expensive ought to be studiously avoided;—chasteness and frugality should appear in every part.

NEAR the house, a *studied neatness* may take place; but, at a distance, *negligence* should rather be the characteristic.

IF a taste for botany lead to a collection of native shrubs and flowers, a shrubery will be requisite; but, in this, every thing should be native. A gaudy exotic ought not to be admitted; nor should the lawn be kept close shaven; its flowers should be permitted to blow; and the herbage, when mown, ought to be carried off, and applied to some useful purpose.

IN the artifical accompaniments, ornament should be subordinate; utility must preside. The buildings, if any appear, should be those in actual use in rural economics. If the hovel be wanted, let it appear; and, as a side screen, the barn and rick yard are admissible; while the dove house and poultry yard may enter more freely into the composition.

IN fine, the ORNAMENTED COTTAGE ought to exhibit cultivated Nature, in the first stage of

refinement. It ranks next above the farm house. The plain garb of rusticity may be set off to advantage; but the studied ornaments of art ought not to appear. That becoming neatness, and those domestic conveniencies, which render the rural life agreeable to a cultivated mind, are all that should be aimed at.

SECTION THE FOURTH.

THE VILLA.

HERE, a style very different from the preceding, ought to prevail: It ought to be *elegant*, *rich*, or *grand*, according to the style of the house itself, and the state of the surrounding country; the principal business of the artist being to connect these two, in such a manner, that the one shall not appear naked or flareing, nor the other desolate and inhospitable.

IF the house be stately, and the adjacent country rich and highly cultivated, a shrubery may intervene, in which Art may shew her utmost skill. Here, the artist may even be permitted to *play at*

landscape: for a place of this kind being supposed to be small, the intention principally ornamental, and the point of view, probably, confined simply to the house, side screens may be formed, and near grounds laid out, suitable to the best distance that can be caught.

If buildings, or other artificial ornaments abound in the offscape, so as to mark it strongly, they ought also to appear, more or less, in the near grounds: if the distance abound with wood, the near grounds should be thickened, lest baldness should offend; if open and naked, elegance rather than richness ought to be studied, lest heaviness should appear.

It is far from being any part of our plan to cavil unnecessarily at artists, whether living or dead; we cannot, however, refrain from expressing a concern for the almost total neglect of the principles here laid down, in the prevailing practice of a late celebrated artist, in ornamenting the vicinages of villas. We mention it the rather, as Mr. Brown seems to have *set the fashion*, and we are sorry to find it copied by the inferior artists of the day. Without any regard to uniting the house with the adjacent country, and, indeed, seemingly without any regard whatever to the offscape, one invariable plan of embellishment prevails; namely, that of

stripping the near ground, entirely naked, or almost so, and surrounding it with a wavy border of shrubs, and a gravel walk; leaving the area, whether large or small, one naked sheet of greensward.

In small confined spots, this plan may be eligible. We dislike those bolstered flower beds, which abound in the suburbs of the metropolis, where the broken ground sometimes exceeds the lawn: nevertheless, to our apprehension, a simple border, round a large unbroken lawn, only serves to shew what more is wanted. Simplicity in general is pleasing; but even simplicity may be carried to an extreme, so as to convey no other idea than that of poverty and baldness. Besides, how often do we see in natural scenery, the holly and the fox-glove flourishing at the foot of an oak, and the primrose and the campion adding charms to the hawthorn, scattered over the pastured lawn? And we conceive that groups and single trees, footed with evergreens and native flowers, and masses, as well as borders of shrubs, are admissible in *ornamental*, as well as in *natural* scenery.

The species of shrub should vary with the intention. If the principal intention be a winter retreat, evergreens, and the early-blowing shrubs, should predominate; but, in a place to be frequented in summer and autumn, the deciduous tribes ought chiefly to be planted.

SECTION THE FIFTH.

PRINCIPAL RESIDENCE.

HERE, the whole art centers. The artist has, here, full scope for a display of taste and genius. He has an extent of country under his eye, and will endeavour to make the most of what nature and accident have spread before him.

ROUND a Principal Residence, a gentleman may be supposed to have some considerable property, and it is not a shrubery and a ground only, which fall under the consideration of the artist: he ought to endeavour to disclose to the view, either from the house or some other point, as much as he conveniently can of the adjacent estate. The love of possession is deeply planted in every man's breast; and places should bow to the gratification of their owners. To curtail the view by an artificial side screen, or any other unnatural machinery, so as to deprive a man of the satisfaction of overlooking his own estate, is an absurdity which no artist ought to be permitted to be guilty of. It is very different, however, where the property of another

intrudes upon the eye: Here, the view may, with some colour of propriety, be bounded by a woody screen.

AFTER what has been said under the head GENERAL APPLICATION, little remains to be added, here. Indeed, it would be in vain to attempt to lay down particular rules: different places are marked by sets of features, as different from each other, as are those of men's faces. Much must be left to the skill and taste of the artist; and let those be what they may, nothing but mature study of the natural abilities of the particular place to be improved, can render him equal to the execution, so as to make the most of the materials that are placed before him.

SOME few general rules may, nevertheless, be laid down. The approach ought to be conducted in such a manner, that the striking features of the place shall burst upon the view at once: no trick, however, should be made use of: all should appear to fall in naturally. In leading towards the house, its direction should not be fully in front, nor exactly at an angle, but should pass obliquely upon the house and its accompaniments; so that their position with respect to each other, as well as the perspective appearance of the house itself, may vary at every step: and, having shewn the front

and the principal wing, or other accompaniment, to advantage, the approach should wind to the back front, which, as has been already observed, ought to lie open to the park or pastured grounds.

THE improvements, and the rooms from which they are to be seen, should be in *unison*. Thus, the view from the drawing room should be highly embellished, to correspond with the beauty and elegance within: every thing, here, should be *feminine*—elegant—beautiful—such as attunes the mind to politeness and lively conversation. The breakfasting room should have more masculine objects in view: wood, water, and an extended country for the eye to roam over; such as allures us, imperceptibly, to the ride or the chace. The eating and banqueting rooms need no *exterior* allurements.

THERE is a harmony in taste, as in music: variety, and even wildness, in its proper place, may be admitted; but discord cannot be allowed. If, therefore, a principal Residence be so circumstanced, as to consist of properties totally irreconcileable, the parts ought, if possible, to be separated in such a manner, that, like the air and the recitative, the adagio and the allegro, in music, they may set off each other's charms by the contrast.

DIVISION THE FOURTH.

PRACTICAL REMARKS

ON

ORNAMENTED PLACES.

HAVING attempted, in the foregoing pages, to lay down some GENERAL PRINCIPLES of the Rural Art, and having endeavoured to convey some general ideas, concerning the APPLICATION of these principles, we now proceed to illustrate them farther, by such practical remarks as have occurred to us, on examining the different places which have more particularly engaged our attention.

SECTION THE FIRST.

PERSFIELD.

FORMERLY the seat of Mr. MORRIS, near Chepstow, in Monmouthshire,—a place upon

which Nature has been peculiarly lavish of her favours, and which has been spoken of, by different writers, in the most flattering terms,—was our first place of study.

PERSFIELD is situated upon the banks of the river Wye, which divides Glocestershire and Monmouthshire, and which was formerly the boundary between England and Wales. The general tendency of the river is from North to South; but, about Persfield, it describes, by its winding course, the letter S, somewhat compressed, so as to reduce it in length, and increase its width. The grounds of Persfield are lifted high above the bed of the river, shelving (from the brink of a lofty and steep precipice), towards the South West.

THE lower limb of the letter is filled with *Perse-wood*, which makes a part of Persfield; but is, at present, an impenetrable thicket of coppice-wood. This dips to the South East, down to the water's edge; and, seen from the top of the opposite rock, has a good effect.

THE upper limb receives the farms of *Llancot*; rich and highly cultivated: broken into inclosures, and scattered with groups and single trees: two well looking farm houses, in the center, and a neat white chapel, on one side: altogether, a lovely

little paradisaical spot. The lowliness of its situation stamps it with an air of meekness and humility; and the natural barriers which surround it add that of peacefulness and security. These picturesque farms do not form a low flat bottom, subject to be overflowed by the river; but take the form of a gorget, rising fullest in the middle, and falling, on every side, gently to the brink of the Wye; except on the East side, where the top of the gorget leans in an easy manner, against a range of perpendicular rock; as if to shew its disk with advantage, to the walks of Persfield.

THIS rock stretches across what may be called the Isthmus, leaving only a narrow pass down into the fields of Llancot, and joins the principal range of rocks at the lower bend of the river.

To the North, at the head of the letter, stands an immense rock (or rather a pile of immense rocks heaped one upon another), called Windcliff; the top of which is elevated as much above the grounds of Persfield, as those are above the fields of Llancot.

THESE several rocks, with the wooded precipices on the side of Persfield, form a circular inclosure, about a mile in diameter, including Perse-wood, Llancot, the Wye, and a small meadow, lying at the foot of Windcliff.

THE grounds are divided into the upper and lower lawns *, by the approach to the house: a small irregular building; standing near the brink of the precipice; but facing down the lower lawn: a beautiful ground, falling 'precipitately every 'way into a valley which shelves down in the middle;' and is scattered with groups and single trees in an excellent style.

THE view from the house is soft, rich, and beautifully picturable:—the lawn and woods of Persfield, and the opposite banks of the river:—the Wye, near its mouth, winding through 'meadows green as emerald,' in a manner peculiarly graceful:—the Severn, here very broad, backed by the wooded and highly cultivated hills of Gloucestershire, Wiltshire, and Somersetshire. Not one *rock* enters into the composition:—The whole view consists of an elegant arrangement of lawn, wood, and water.

THE upper lawn is a less beautiful ground, and the view from it, though it command the 'cultivated hills and rich vallies of Monmouthshire,'

* Mr. Wheatley says, the park contains about three hundred acres: but we think the two *lawns* cannot contain so much; and if the hanging wood at the bottom of the lower lawn, with the face of the Precipice and Perse-wood be added, they contain a great deal more.

bounded by the Severn, and backed by the Mendip-hills, is much inferior to that from the house.

To give variety to the views from Persfield, to disclose the native grandeur which surrounds it, and to set off its most striking features to advantage, walks have been cut through the woods,—and on the face of the precipice,—which border the grounds to the South and East. The viewer enters these walks at the lower corner of the lower lawn.

The first point of view is marked by an alcove, from which are seen the bridge and the town of Chepstow, with its castle situated, in a remarkable manner, on the very brink of a perpendicular rock, washed by the Wye: and, beyond these, the Severn shews a small portion of its silvery surface.

PROCEEDING a little farther along the walk, a view is caught, which the pencil might well copy, as a complete landscape: The castle, with the serpentine part of the Wye below Chepstow, *intermixed* in a peculiar manner with the broad waters of the Severn, form the middle ground; which is backed by distant hills: the rocks, crowned with wood, lying between the alcove and the castle, to the right; and Castlehill farm, elevated upon the opposite banks of the river, to the left—form the side skreens.

This point is not marked, and must frequently be lost to the stranger.

THE grotto, situated at the head of Perse-wood, commands a near view of the opposite rocks:— magnificent beyond description! The littleness of human art was never placed in a more humiliating point of view:—the castle of Chepstow, a *noble fortress*, is, compared with these natural bulwarks, a mere *house of cards*.

ABOVE the grotto, upon the isthmus of the Persfield side, is a shrubery:—strangely misplaced! an unpardonable intrusion upon the native grandeur of this scene. Mr. GILPIN's observations upon this—as they are upon most occasions—are just. He says, 'It is pity the ingenious Embellisher of these scenes could not have been satisfied 'with the great beauties of Nature which he commanded. The shruberies he has introduced in 'this part of his improvements, I fear will rather 'be esteemed paltry.'——'It is not the shrub 'which offends: it is the *formal introduction* of it. 'Wild underwood may be an appendage of the 'grandest scene: it is a beautiful appendage. A 'bed of violets or of lillies may enamel the ground 'with propriety at the foot of an oak; but, if you 'introduce them artificially in a border, you introduce a trifling formality, and digrace the noble

'object you wish to adorn,'—GILPIN *on the Wye*, p. 42. *)

THE walk now leaves the wood, and opens upon the lower lawn, until coming near the house it enters the alarming precipice facing Llancot; winding along the face of it, in a manner which does great honour to the artist. Sometimes the fragments of rock, which fall in its way, are avoided, at other times, partially removed, so as to conduct the path along a ledge carved out of the rock; and in one instance, a huge fragment, of a somewhat conical shape, and many yards high, is perforated; the path leading through its base. This is a thought which will hand down, to future times, the greatness of Mr. MORRIS's taste: the design and the execution are equally great: not a mark of a tool to be seen; all appears perfectly natural. The archway is made winding, so that, on the approach, it appears to be the mouth of a cave; and, on a nearer view, the idea is strengthened by an allowable deception; a black dark recess, on the side next the cliff, which, seen from the entrance before the perforation is dicovered, appears to be the darksome inlet into the body of the cave.

* This shrubery was not introduced, as a PLACE OF VIEW; but merely as a pleasure-ground, or flower garden.

FROM this point, that vast inclosure of rocks and precipices, which marks the peculiar magnificence of Persfield, is seen to advantage. The area, containing, in this point of view, the fields of Llancot and the lower margin of Perse-wood, is broken, in a manner peculiarly picturesque, by the graceful winding of the Wye; here washing a low grassy shore, and there sweeping at the feet of the rocks, —which rise in some places perpendicular from the water: but in general they have a wooded offset at the base; above which they rise to one, two, or perhaps three or four hundred feet high; exposing their ample fronts, silvered by age, and bearded with ivy, growing out of the wrinkle-like seams and fissures. If one might be allowed to compare the paltry performances of art with the magnificent works of nature, we should say, that this inclosure resembles a prodigious fortress, which has lain long in ruins. It is, in reality, one of nature's strongholds; and, as such, has probably been frequently made use of.—Across the isthmus, on the Gloucestershire side, there are the remains of a deep intrenchment, called to this day the Bulwark; and tradition still teems with the extraordinary warlike feats, that have been performed among this romantic scenery.

FROM the perforated rock, the walk leads down to the cold bath (a complete place), seated about

the midway of the precipice, in this part less steep: and, from the cold bath, a rough path winds down to the meadow, by the side of the Wye, from whence the precipice, on the Persfield side, is seen with every advantage: the giant fragments, hung with shrubs and ivy, rise in a ghastly manner, from among the underwood, and shew themselves in all their native savageness*.

FROM the cold bath upward, a coach road (very steep and difficult) leads to the top of the cliff, at the upper corner of the upper lawn. Near the top of the road, is a point which commands one of the most pleasing views of Persfield. The Wye, sweeping through a grassy vale, which opens to the left: Llancot, backed by its rocks, with the Severn immediately behind them, appearing, in this point of view, to be divided from the Wye, by only a sharp ridge of rock, with a precipice on either side: and, behind the Severn, the vale and wooded hills of Gloucestershire.

FROM this place, a road leads to the top of Windcliff—astonishing sight! The face of nature pro-

* There is another way down into this meadow: a kind of winding staircase, furrowed out of the face of the precipice, behind the house, and leading down into a walk, made on the side of the river; but being at present out of repair, the descent, this way, is rendered very difficult, and somewhat dangerous.

bably affords not a more magnificent scene! Llancot in all its grandeur; the grounds of Persfield; the castle and town of Chepstow; the graceful windings of the Wye below, and its conflux with the Severn: to the left, the forest of Dean: to the right, the rich marshes and picturesque mountains of South Wales: a broad view of the Severn, opening its sea-like mouth; also the conflux of the Avon, with large ships at anchor in King-road, and vessels of different descriptions under sail: Aust-Cliff, and the whole vale of Berkeley, backed by the wooded swells of Gloucestershire; the view teminating in clouds of distant hills, rising one behind another, until the eye becomes unable to distinguish the earth's billowy surface from the clouds themselves*.

WERE we to suggest the farther improvement of this place, it would be to separate the *sublime* from the *beautiful*; so that in viewing the one, the eye might not so much as suspect that the other was near.

LET the *hanging walk* be conducted entirely along the precipices, or through the thickets, so as to

* The waters of the Severn and Wye, being principals in these views, and being subject to the ebbings and flowings of the tide, which, at the bridge of Chepstow, rises to the almost incredible height of forty or fifty feet; it follows, that the time of spring tide and high water is the properest time for going over Persfield.

disclose the natural scenery, without once discovering the lawn, or any other acquired softness. Let the path be as rude as if trodden only by wild beasts and savages, and the resting places, if any, as rustic as possible.

ERASE, entirely, the present shrubery, and lay out another, as elegant as nature and art could render it, before the house, swelling it out into the lawn, towards the stables; between which and the kitchen garden make a narrow winding entrance.

CONVERT the upper lawn into a deer paddock, suffering it to run as wild, rough, and forest-like, as total negligence would render it.

THE viewer would, then, be thus conducted: He would enter the *hanging walk* by a sequestered path at the lower corner of the lawn*, pursuing it through the wood to beneath the grotto; and round the head land, or winding through Perse-wood, to the perforated rock and the cold bath; without once conceiving an idea (if possible) that art, or at least that much art, had been made use of, in disclosing the natural grandeur of the surrounding objects; which ought to appear as if they

* A young plantation, below the entrance into the lower lawn, has been placed as it were for that purpose.

presented themselves to his view, or at most, as if nothing was wanted, but his own penetration and judgement, to find them out. The walk should, therefore, be conducted in such a manner, that the breaks might be natural, yet the points of view obvious, or requiring nothing but a few blocks or stones to mark them. A stranger, at least, wants no seat here; he is too eager, in the early part of his walk, to think of lounging upon a bench.

FROM the cold bath he would ascend the steep, near the top of which, a commodious bench or benches might be placed: the fatigue of ascending the hill would require a resting place; and there are few points, which afford a more pleasing view than this; it is grand, without being too broad and glaring.

FROM these benches he would enter the *forest* part. Here the idea of Nature in her primitive state would be strengthened: the roughnesses and deer to the right, and the rocks in all their native wildness to the left. Even Llancot might be shut out from the view, by the natural shrubery of the cliff. The Lover's Leap, however (a tremendous peep), might remain; but no benches, nor other work of art, should here be seen. A natural path, deviating near the brink of the precipice, would bring the viewer down to the lower corner

of the park; where benches should be placed in a happy point, so as to give a full view of the rocks and native wildnesses, and, at the same time, hide the farm houses, fields, and other acquired beauties of Llancot.

HAVING satiated himself with this savage scene, he would be led, by a still rustic path, through the labyrinth—when the shrubery, the lawn, with all its appendages, the graceful Wye and the broad silver Severn, would break upon the eye, with every advantage of ornamented nature; the transition could not fail to strike.

FROM this soft scene, he would be shewn to the top of Windcliff, where, in one view, he would unite the sublime and beautiful of Persfield.

SECTION THE SECOND.

STOWE.

THE next place we went over, previously to the composition of the foregoing part of this work, was STOWE, near BUCKINGHAM, the seat of EARL TEMPLE, now the MARQUIS OF BUCKINGHAM:

a place which, on many accounts, claims an early attention *.

STOWE is a creation of art, a contrast to Persfield. It was among the first places which were formed on the principles of modern taste; and might be said to give birth to the PROFESSION; as being the seminary in which the genius of the great professional Artist, Brown, was unfolded.

STOWE is situated in a cultivated country, with a surface somewhat billowy, but without the advantage of bold distant views, to give it feature and effect. The ornamented grounds are extensive; containing, we were told, near four hundred acres; defined by a sunk fence; and including a dip or shallow valley, through which a rill naturally ran.

OUT of these slender materials; by the means of this tame valley, and this inconsiderable stream; all that is beautiful at Stowe has been formed: the rest is planting and masonry; the mere work of men's hands: facts which prove the excellency of the art of which we are writing; evincing its infant powers in a very extraordinary manner.

* This place was seen in October 1783.

THE grounds were originally outlined by LORD COBHAM. The lower, or "old part," was laid out by LOVE (to whose history we cannot speak). The upper, or "new part," by BROWN, whose works, we believe, remain as yet the only public records of his history! *

THE old part is marked by a LAKE, or irregular piece of water, of about ten acres in extent; producing in itself, and with the wood on its margin, a pleasing effect; but the cascade, which is occasionally played off from this reservoir, is a trick unworthy of Stowe, and the art to which Stowe owes the beauties it possesses. A waterfall, in a tame site, is unnatural; and the circumstance of waiting until it be let off, renders it almost ridiculous.

THE new part is equally marked by a RIVER, formed with judgement, and good effect; as occupying the lowest ground; winding, naturally, in the bottom of the valley.

* The above particulars we had from an intelligent guide, who had lived forty years at Stowe, and who shewed the gardens some years for BROWN; adding, that BROWN lived eleven years, as *gardener* and *bailiff* at Stowe: that, during the latter part of his servitude, he had the liberty of laying out grounds for others; that he made the Duke of Grafton's great water, while he lived at Stowe; and that from Stowe he went to Blenheim.

THESE WATERS claim the best attention of the rural artist: they are, indeed, the almost only subjects of study, at Stowe. The PLANTING having been done, at different times, by various hands, and under a varying style of embellishment, has probably undergone much alteration, and has acquired a stiffness of outline, and a heaviness of composition.

THIS heaviness of style is increased by a profusion of BUILDINGS; thrown across each vista, and guarding each glade*. Art has evidently done too much at Stowe. It is over wooded and over built: every thing appears to be sacrificed to Temples; an elegant arrangement of lawn, wood, and water, is seldom to be seen, in open day-light, in these grounds. We recollect but one: this is between the Palladian Bridge and the Gothic Temple, about half way up the rise; where a sweet view of the river, with the lawns and wood on its banks, is caught: but this view being unmarked, it must frequently be passed unnoticed.

* These BUILDINGS, we learnt from the same authority, are all by BROWN; except the *Temple of Venus* by KENT (circumstantial evidence that he had some share in the planting), and except the *Rotundo*, and the *Temple of Bacchus*, by SIR JOHN VANBURGH. *Mr. Walpole*, however, mentions GIBBS, as having had a part in these erections.—*Anecd. of Painting*, Vol. IV. p. 94.

WE do not mean wholly to decry ORNAMENTAL BUILDINGS, in embellished scenery. In places of magnitude, and where the higher degrees of embellishment are required, especially where a magnificent modern-built house forms a principal in the composition, ARCHITECTURAL ORNAMENTS become in a degree requisite. But they should ever appear as *Embellishments* in a scene, and not assume the character of *Principals*; unless, perhaps, in a sequestered part of extensive grounds, where no outlet to the eye, no offscape, can be had; and, there, an ornamental building may appear, as the Principal of an INTERIOR, with advantage. With a view to the study of this subordinate department of the Rural Art, no place, perhaps, is more worthy of the young Artist's attention than STOWE.

IN the higher part of these grounds; near the fluted column, erected, if we recollect rightly, by LADY COBHAM, to the merits of her husband, during his life-time; we were pleased to see some tufts of trees, shrubs, and flowers, growing promiscuously; and in the same natural way, in which we had long wished to see them, in ornamented Nature. These clumps are placed on the edge of the terrace, or unseen fence, which divides the kept grounds from the adjoining fields,—stocked with grazing cattle. They have, of course, a doubly

good effect; as being in themselves ornamental, and as assisting to mix and assimilate the kept with the unkept grounds. For the latter purpose, however, they were, at the time we saw them, in too high keeping: an error which a little neglect would soon rectify.

To detail the view from every Temple would convey little useful information to our readers. That from the Temple of Concord and Victory (erected, we believe, in honour of the great LORD CHATHAM) is the most interesting of the interior views. It consists of a narrow grassy valley or dell, thickly wooded, on either side; in a way which we not unfrequently see, in Nature. But the effect is hurt, by two side vistas opening, in a formal manner, upon two obeliscal buildings; from which, in return, the Temple of Concord is seen. This sort of reciprocity of view may often be given with good effect. But it should ever appear as an effect of accident, rather than of design, and cannot please when introduced in a forced or formal manner.

THE eye having dwelt awhile, with pleasure, in this hollow glade, something unnatural in the shelving of the ground was perceived. On closer examination, and still closer enquiry, this beautiful dell was found to be a work of art: not set about,

however, with the intent to produce an artificial valley, but an artificial river!

THIS miscarriage is not brought forward, here, in detriment to the professional character of Mr. BROWN. Every novice, in every art, is liable to commit errors; and one mistake, in the course of an extensive practice, is but a single blot in writing a volume. We produce it as a lesson for young artists. Water can seldom be retained with advantage, in upland situations; even where the substratum is retentive. In places where this is absorbent, and where the neighbourhood affords no materials to correct the defect, it is in vain to attempt it.

MR. BROWN, however, on discovering his error, had great merit in the manner of correcting it. Sloping away the bank of the *river*, and thus forming a *valley*, instead of returning the excavated materials to their former state, shewed, in a favorable light, his talent for expedient. In the case under notice, the effect of the grassy dell is infinitely better, than any which a weed-grown canal could ever have produced; beside the injury which water, pent up in that situation, must have done to the grounds that lie below. A man may discover as much talent, in making a retreat, as in gaining a victory.

SECTION THE THIRD.

FISHERWICK.

THE Seat of the MARQUIS OF DONEGALL, near LICHFIELD, was the next place which particularly engaged our attention*.

THE natural situation of FISHERWICK is still gentler than that of Stowe; where some undulation of surface gives a degree of variety to the grounds themselves, and where distances, though seldom interesting, are sometimes caught. But the site of Fisherwick is a flat, without any relief to the eye; except some rising grounds on the banks of the Tame; which, however, though beautiful in themselves, are not seen from Fisherwick, with advantage; and except a gentle swell of ground, which rises behind the house, and which has been judiciously chosen as the more immediate site of embellishment.

AT the foot of this swell, ran a considerable rivulet, or small brook, severing it from the house

* In November 1784, and June 1785.

and park: a flat infertile heath; such as we see in various parts of this island; and such as never fails to disgust the eye; more, perhaps, than any other passage of surface, which the island affords.

THE embellishments have been effected by breaking the greensward of the rising ground, behind the house, with planting; the boldest and most beautiful part of it being judiciously preserved in lawn,—scattered with groupes and single trees. The further extremity is a continued grove; and the point towards the house is also planted; to hide the kitchen garden, and to give to this confined site, all the feature and expression it was capable of receiving.

IN the dip, between the garden and the park, in which the rivulet formerly ran, a broad REACH OF WATER is formed; winding up to a large and well built stone bridge, over which the road from Lichfield passes; and its margins are well wooded: circumstances that unite in giving this Reach of Water, as seen from the Grounds, every picturable advantage of a natural River of the first magnitude.

IMMEDIATELY below this Reach, an irregular bason, or lakelet is formed with the passing stream. This bason is open, on one side, to the windows;

but is judiciously backed by planting; and produces a beautiful effect, as seen from the house*.

In the front of the house, the lawn swells out fully to the park; from which it is separated by a well managed sunk ſence. This lawn shelves down, towards the banks of the Tame (deep sunk, unsightly, and unseen, from the grounds of Fisherwick), and embraces the unwooded margin of the lower water. It is naked; except in so far as it is broken by an an aged Sycamore in the principal front of the house,—one or more groupes of Planes in the East front,—and an irregular mass of shrubs, well placed upon the brink of the sunk fence, against the park.

THE PARK, containing some five hundred acres, is encircled, in great part, by skreen plantations; on the outside of which is a public road; on the inner side, a chain of Oaks and Elms, placed at such a distance from the paling, as to form a drive round the park; whose flatted surface is broken, and relieved, by large circular clumps; chiefly of

* This effect, however, is, in our opinion, much injured, by a *noisy cascade*, which is formed between these two waters, under the windows of the *library*. A pebbled stream, shaded by Alders, or other Aquatics, would, we think, have been more in character with the site.

Scotch Firs; with single trees interspersed, to add to the variety.

THE HOUSE is a large and splendid pile of building,—in the best style of modern architecture; and, near the summit of the swell, by the side of the lawn, and under the shelter of the more distant grove, which have been mentioned, stands a superb Conservatory;—a conspicuous object from the approach, and the only conspicuous building in the grounds of Fisherwick*.

THE principal APPROACH is across the park, which it enters at a considerable distance from the house: nevertheless, its two open fronts are seen from the entrance, and are kept all the way in view from the road; which, however, does not lead in a direct line to the house; but bends somewhat to the right of it, to give a fuller view of the grounds (which in this line of approach lie to the right of the house), as well as of the second or East front; but arriving near the house and grounds, it

* A CONSERVATORY, however, though it may appear advantageously, as the principal of an interior, is not ornamental, in composition. To render it fit, as a receptacle of tender plants, too large a surface of glass is required, to admit of architectural proportion. We speak of the south front of this species of building: the north front, being susceptible of ornament, may be rendered picturable in composition.

takes a bold sweep across the principal front, as with the intention of passing them entirely; in a direction, however, so oblique, as to reach the line of front at the offices, adjoining to the house; where, bending sharply to the right, it enters the lawn, and terminates at a suberb portico, in the principal front.

THIS approach, though in the main part it is admirably conducted, has two objectionable things belonging to it. The house, as seen from the park gate, at more than half a mile distance, appears a confused mass of building: not a feature can be distinguished: it is some time before the eye determines whether it is one or two fronts that are approached. The grounds, too, at that distance are indiscriminate; the whole assemblage has the effect of a distant prospect, seen from an eminence. Beside, the unbroken flatness, between the house and the entrance into the park, offends. Had a few of the masses of planting, which are scattered over the park, been placed between the lodges and the house, the road winding easily through them, until it had reached the first bend which has been mentioned, the effect would have been better. On leaving the skreen of wood to the left, the grounds and house would, in that case break upon the eye, in their fullest splendor and in the best point of view.

ITS termination is also rendered objectionable, by entering the lawn: but, at Fisherwick, this could not easily be avoided: the offices occupy the third front. The artifice of passing the principal front, and then returning to it, is the more venial, as some elegant pilasters, placed on the back part of the portico, and apparently moving behind the stately columns in front, as they are passed, produce a pleasing effect. Beside, by this contrivance, the gate of the lawn is brought near the offices, and an unsightly entrance, in the immediate front of the house, evaded.

A MERE state entrance may be permitted within barriered grounds. But many are the inconveniences and embarrassments avoided, by terminating the approach, at an *unguarded* front.

BUT, perhaps, the most objectionable part of the operations, at Fisherwick, is that of encumbering the park with Firs. It may not, however, be too late to set about correcting the error. The Scotch Fir, in genial situations, is not of long duration; soon acquires its highest state of profitableness; and it might be right, now, to form massess of deciduous trees, various in extent and outline, in the interspaces of the present clumps, which may be gradually removed, as they become ripe, and as the deciduous trees may rise into sufficient importance, to appear alone.

OF the more highly embellished grounds of Fisherwick, it would be difficult to say too much: even in the recluse parts, we find subjects of instruction. A secluded lawn, in the wooded quarter, between the great water and the park, has a charming effect. A lawn amidst extended wood affords the same *relief*, as a mass of wood on a wide expanse of lawn.

THIS wooded quarter terminates at the offices; being cut off from the lawn before the house, by the road which leads through the stable yards to the West front; the ordinary approach to the house. And here the walk, which winds through the shrubery, seems to terminate: but before it reaches the extremity, it begins to sink gradually; and, in proceeding, dips beneath an archway, turned under the road; ascending, as leisurely, on the other side of it, until it is raised to the surface of the great lawn. By this admirable expedient, which may frequently be copied with equal advantage, Ladies are enabled to make the entire circuit of the grounds, without setting the foot on a carriage road; except that in the front of the house; which is highly kept, and the materials remarkably good.

THE planting, too, is done in a masterly manner: the trees are well chosen, well arranged, and

well planted; are every where luxuriant, and flourishing. The Planes and American Firs, which are scattered in groups and single trees, over the lawns, and especially over a slope shelving to the banks of the Tame, are superiorly elegant.

If we were to censure any part of the design, with respect to planting, it would be, in having, crouded the valley or dip, immediately behind the house, with forest trees; which, with the water, added to the natural flatness of the situation, will mutually contribute to render the house damp, and the air unwholesome. Yet, foreseeing the charming effect which lofty groves (such as the present plantations will probably become a century hence), embracing the house, will certainly have, we admit the propriety of the design: and a judicious possessor will endeavour to prevent the bad, without destroying the good, effect.

Indeed, judicious as the interior arrangement and embellishment of the grounds of Fisherwick are in general, they have evidently been secondary considerations of the artist. His great aim has obviously been to throw the whole place, as seen from the approach, into one grand composition; and he has succeeded. For in this point of view, the general assemblage is not only striking, as a passage in ornamented nature; but puts on an air

of magnificence, which Fisherwick, taken in detail, cannot claim. The park, when crossed in the direction of the approach, appears extensive; a suite of meadows adjoining to it, and a further suite, on the opposite side of the Tame, encrease the apparent extent of the place. The grounds, too, as seen from the near approach, hanging on the swell, and every way endless to the eye, contribute to its magnitude and grandeur. But what adds most to this idea, and shows the talents of the artist in the most unequivocal light, is a vista, purposely left, between the groves which occupy the extremities of the embellished grounds, with an unseen fence, which lets in the summit of the swell, a rich meadow or pasture ground, with the heads of some large trees, which appear at different distances, beyond it; thus conveying the idea of an extent of rich park lands; or of embellished grounds, in continuation to those which are immediately under the eye. The House, too, stately and new, embosomed in aspiring groves, and backed by some fine old trees that rise above them,—contributes not a little to make up an ASSEMBLAGE, which gives the eye and the mind great satisfaction. BUT THE WHOLE IS BROWN'S. The grounds, the groves, the waters, and the house, *are all his own*.

SECTION THE FOURTH.

THE LEASOWES.

THE LEASOWES fell next under view*. This place was laid out by its owner, the celebrated poet, SHENSTONE; who lived and died here.

IT is situated in a detached part of Shropshire, lying between the counties of Worcester and Stafford. The site is more strongly featured than either of the places last decribed. It occupies the broken slope of one of the rugged hills that form a considerable proportion of the surface of this county; which abounds, for many miles round, with picturable scenery: a species of country frequently found, in the neighbourhoods of mountains,—of whose style it partakes, in the general formation of its surface; but is on a smaller scale, and is less broken than mountain surfaces; being generally covered with productive soil; not exposing bare rocks, or broken precipices.

* In June 1785.

THE house is seated under the brow of a bold hang that overlooks the place; but upon a rising ground, which is formed by two narrow dells, that unite below it: thus occupying an elevated situation, near the center of the grounds; which it commands, without standing too high and staring.

THE approach is on the lower side of the grounds, below the house; but there being no inn or accommodation near it; and travelling, with a friend, on horseback, we left the public road from Birmingham, before we reached the foot of the hill; and quitting our horses, entered the grounds, in a more elevated part,—about the midway of the slope; thus gaining, at once, some general idea of the site.

WITH this first appearance of the place we were disappointed. The ground seemed less broken, and the character of the site less romantic, than we expected. Indeed, its character, in this line of approach, is beauty: four or five well turned Limes, and an elegant Ash, rising on a gentle swell, backed by a luxuriant grove of young forest trees, welcomed the eye with a modest, simple, beautiful view.

FALLING in with a made path, we were led down to the lower corner of a pasture ground;

where a bench marks a wider, and more strongly featured view: the ground uncommonly fine: a beautiful middle ground between two wooded skreens; backed by a bold steep, also hung with wood. A group of Scotch Firs, old and ragged, on the near ground, is a pimple on this fine face, —an honest front.

EVERY part of a view, as each article of the same dress, should be in character: these ragged illfavoured Firs, staring on a rugged point, in a rocky, ragged, picturesque scene, would be in place.

FOLLOWING the path, along the bottom of this interesting inclosure, we entered the larger dingle; a deep rugged gulley, worn by torrents from the hills; such as we see in every broken, hilly country: we have crossed twenty such, as this was by nature, in one morning's diversion, on the broken margin of the Vale of Pickering: and should probably have crossed this, unnoticed, had it not been for a dirty little obelisque, bearing a Latin inscription, and a few seats, which are scattered, here and there, in what, if we recollect rightly, is named *Virgil's Grove*. This lettered retreat occupies the bank or brink of the dingle; across which a dam being thrown, a reservoir of water and a cascade are at once formed: not a flight of steps; but a

tolerable imitation of a natural waterfall,—of ten or more feet in height; and, below this, a shorter fall is seen, without a head of water.

UNFORTUNATELY, however, for Art, she could not augment the stream; which is naturally much too slender, to give full effect to this ingenious device; sacred, we understood, to *Venus*. This cascade only plays occasionally; and we arrived at an uninteresting moment.

PURSUING a path, down one side of the waterless channel, we came to a "root house"—a rustic alcove; and, passing through this, soon found ourselves at the principal entrance: happily designed! well calculated to impress the mind with romantic imagery; and those who are desirous of being *enchanted*, at the Leasowes, should certainly enter here. Indeed, the entire dingle, between this entrance and the reservoir, is delightful; or would be, if its native rill were permitted to gurgle in its own channel; which, by nature or art, is happily strewed with stone and pebbles; and overhung with trees,—that stretch their crooked arms, from the high rugged banks which accompany it; filling it with gloom, and an air of solitude; which, in contrast to gayer scenery, is ever delightful to minds bending willingly to contemplation.

How many passages, equally delightful, has Nature furnished, in this island. All that art can add are rustic paths, to render them pervious to human footsteps, with such resting places as fortuitous circumstances will ever point out; as the shelf of a rock, the trunk of a fallen tree; or natural coves in the banks, furnished with blocks or benches: a species of rural embellishment which is procurable at a small expence.

THE path, which accompanies this pebbly channel, leads down to a pool of water, at the junction of the two dells; fed by this and a sister rill, which passes occasionally down the further branch. Over this pool, the church of Hales-owen, backed by a well broken distance, produce a picturable view; and near this piece of water, stands a mean-looking building, or ruin, or either, named the *Priory*.

PROCEEDING up the dell, by a path which leads towards the house, we stooped into another rustic alcove, formed with the roots of trees, and calked with moss;—above which appeared another dry cascade!

WISHING to see the economy and effect of one of these ingenious contrivances, the person who had the care of the grounds obligingly indulged

us; and having examined the reservoir—a well sized horse pool—and seen the stopple, we took our seats in the root house, last mentioned,—where

"'Twas silence all and pleasing expectation—"

At length, the water gushed out from among some large roots of a tree, falling five or six feet perpendicular; presently we saw it again tumbling down another *precipice* (of three or four feet high)—and another; until my companion was in extacy. And having made a graceful sweep at our feet, it hid its head among some roots and well formed rocks. "Very pretty upon my word!" And pray is not the cascade of tin and horsebeans at Vauxhall very pretty? *Quære*, Did Vauxhall copy after the Leasowes, or the Leasowes after Vauxhall?

LEAVING our cool retreat, we climbed the steep: an ardous task in a hot day. But the views repaid us amply for the toil. The Clent and Wichbury Hills, Kinver Edge, with other picturable eminences, form a variety of pleasing compositions. This natural gallery abounds with lounging places, and long inscriptions. The path, however, in the part which immediately overlooks the house and grounds of the Leasowes, is well conducted deviating, naturally, and giving variety of view.

BUT, in the farther part of the same steep, and lower down the face of it, a straight walk, with a building at one end (a Temple of Pan, or of any other deity or demon), and with a formal vista in the middle of it, lined out at right angle, in London and Wise's best manner, appear in a fine hanging grove, which overlooks the pasture ground we first entered. This part is probably of more antient date than the rest.

FINDING ourselves near our horses, we dispensed with the proffered display of the grand cascade, and set out for Hagley; leaving the Leasowes, notwithstanding the day was peculiarly favorable to shady groves and purling streams, somewhat disappointed. For what is it? An ornamented farm? No such thing. What has farming to do with Temples, Statues, Vases, Mottos, Inscriptions, Mock Priories, and Artificial Cascades? Yet do away these and who would visit the Leasowes: for what would it be then? Why, what it is now held out to be; an ornamented farm; a lovely little spot! Let the paths and the benches (or more simple seats) remain: lay out others across the farm; now seemingly much wanted: let the rills babble in rough stoney channels (no matter whether altogether natural, or assisted by art), and if a head of water be deemed indispensable, let it be applied to the purpose of turning the wheel of

a corn mill; a natural appendage to a farm; and ever a pleasing object in recluse scenery. Had poor Shenstone adopted this idea, in the outset of his plan, he might yet (1785) have lived to enjoy his place; or, while he had lived, might have been happy. It was the expensive baubles we have seen, which threw him on the rack of poverty; and probably hastened the dissolution of an amiable and valuable man. Strewing pebbles in the channels of the rills, cutting the paths, and providing a few simple seats; removing the deformities, and shewing the natural beauties of the place, and the distances it commands, to advantage, would have been a comparatively small expence, which he might have coped with. But does not this view of the Leasowes suggest practical ideas? how many places there are, in this island, which, with a similar expence, might be rendered equally delightful.

SECTION THE FIFTH.

HAGLEY.

THIS has long been celebrated as a show place; and is yet in high repute, if we may judge from the concourse of company and carriages which we

found at the inn. A king's plate, or a music meeting, could not have created a greater bustle.

HAGLEY is situated only a few miles from the Leasowes; in the same beautifully broken district. The site, like that of the latter, occupies the slope of an extended hill; but the scale is larger, and the features more prominent and striking than those of the Leasowes. The principal feature is a bold headland, or hanging knoll; split by a chasm, down which a slender rill naturally trickled; but which is now interrupted by dams and cascades; the whole thickly covered with wood, so that no broken ground outwardly appears.

AT the foot of this hanging swell stands the house; from which a still bolder steep is seen, at a short distance; through an open valley or glade; formed by the wooded slope of the first mentioned hill, on one side, and by a shrubery grove, on the other. The house is surrounded by a lawn, of which the glade forms a part; and, below the house and lawn, is an extent of meadow.

THE first view which strikes, at Hagley, is that from the house, up the glade which has been mentioned, and which is scattered with beautiful Esculuses, and margined with fullgrown tufted forest trees, which clothe the slope, and hang down in

loose festoons, at its feet; forming deep and dark recesses. The glade itself, sweeping round a bold festoon of this forest hang, is lost to the eye; which now glances across the public road (sunk low and unperceived) to the face of Wichbury Hill; a sublime passage of ground; a tempest wave of the Bay of Biscay. The part under view is a close bitten sheep walk, scattered with groups and single trees, and terminating with a tall well proportioned obelisk, standing on the summit of the hill. To the right, a grove of Scotch Firs, hanging on an almost perpendicular brow; and, embosomed in these, a sumptuous colonnade is seen. To the left, a lofty wood, which crowns the apparent summit on that part, and closes the view: the most striking composition of ground, wood, and turf, we have ever seen; especially when the glaring white building in the first distance is covered, as it may be, with a handsome tree in the foreground.

WHY the obelisk should please so fully in this view, is difficult to be accounted for; but seen as it is, terminating the view, and upon the summit of the hill, with no other back ground than the clouds, it certainly adds to the general effect:—its colour is that of stone in the quarry; its shape is finely proportioned: it is lightness and elegance itself; perfectly according with the beautiful near-

grounds; which, by the way, are hurt by a ragged, aukward Pear tree, that ought to be removed.

THE church (a low building) which stands near the house, at the more immediate foot of the slope, is inveloped in a deep festoon of the forest trees that cover this magnificent feature of Hagley.

ABOVE the church yard, is a remarkable congeries of Limes, near sixty feet high, and fifty feet arm; with a large Wych Elm, twenty-one feet girt; and several other large old trees.

A RILL prattling in a paved channel, by the side of the walk, which leads up to the cascade, and other interior operations, in this magnificent forest scenery, is a charming companion in a dry sultry season: unfortunately, too dry for the cascades of Hagley: the upper springs, which feed the reservoir, being dried up! a circumstance we seriously regretted: for, here, the site is such, as may be supposed to produce a natural cascade; lofty, steep, and strongly featured; a wild mountain dingle: strangely disfigured by a polished rotundo, perched near the top of it; mixing in the view, as seen from the gapesee below, with the shaggy furniture of this finely savage scene; which, if it were supplied with a mountain torrent, would be at once grand and awful.

If art must needs meddle with natural streams, how much more eligible are irregular falls, than flights of steps. In wild, romantic, and especially in rocky situations, *Shenstonian cascades* may ever produce, momentarily at least, a pleasing effect. But let them appear in whatever situation they may, if a sufficient supply of water cannot be commanded, to feed a perpetual fall, the reflections which follow the idea of playing them off, as raree-shows, must ever lower the enjoyment.

Beside the cascade, the interior of the wood contains grottos, statues, and fair buildings; but the fairer Oaks with which this magnificent ground may be said to be loaded, and which prove it to have worn its present honors for some centuries past, give the mind the fuller satisfaction.

The views from the top of the park are grand and extensive; and the wood scene, from *Thomson's Seat*, is nobly fine; but not more so than what we have seen frequently occur, in strongly featured woody countries. The view is much better, in our eye, a little below;—where *Pope's Building* is not seen; the sequestered lawn which contains it is enough: a bench is here wanted.

Upon the whole, Hagley, as the Leasowes, has fallen short of our expectation; which had unfor-

tunately been raised too high. The obelisk scene apart, we would not have ridden five miles to have seen it. The dingle, the wood scenes, the sequestered lawns, and the fine timber, are doubtless all charming objects; and, to those who have not been in the habits of viewing such scenery, it is worth going ten times that distance to see them.

INDEED, throughout, there is a greatness of taste, which does the noble artist, who embellished it, great honor. It is probable, however, that LORD LYTTELTON was assisted, in his designs, by MR. SHENSTONE, and by other men of taste and genius, among whom he lived; and often, no doubt, at Hagley.

THE cascade, and the classical allusions are after the manner of the Leasowes:—indeed the two places are evidently of the *same genus*; their *specific difference* consisting in Hagley's being on a larger scale, more strongly featured, and more fully wooded. Their embellishments, as well as the views from them, are very similar. Their ages, too, are similar: they are both of them growing *seedy*. While they flourished under the eyes of their designers, they were probably in better keeping. The Leasowes, however, is now as well kept, perhaps, as it ought to be; and there is nothing strikingly negligent at Hagley. They have both

of them reached that state of maturity, when a polished neatness is less required, than it is during the early bloom of embellished places.

SECTION THE SIXTH.

ENVILLE.

FROM Hagley we proceeded to ENVILLE, the seat of the EARL OF STAMFORD, in the same picturable district; leaving with reluctance a lovely view of Shropshire, as seen from the inn garden at Hagley; one of the most pleasing views this district had afforded us.

ENVILLE, in situation, is similar to Hagley and the Leasowes. The immediate site is the precipitous face of an extended hill, broken into furrows, and watered by rills; of which there are two, as at the Leasowes, that unite near the house, at the foot of the slope. The site of Enville is the steepest, most lofty, and largest of the three: containing several hundred acres, divided chiefly into sheep walk and coppice wood, with kept grounds near the house, and with meadows and arable lands round the church and village, in the plain below.

IN viewing these grounds, we were led to a summer-house-like building, at the immediate foot of the hill. It is situated upon the head of a small piece of water; beneath it, is a boat house; over it, a whimsical room; with a large painted glass window, towards the water. Finding nothing here to entertain, we signified a desire to proceed; but the guide (blockhead he for not amusing us better, or we for being in so great a hurry in so hot a day) informed us that a person had been sent to let off the cascade: a piece of information which, after what we had hitherto seen of cascades, was no great inducement for us to delay. Presently, however, the window was thrown open; and the most brillant scene we had ever beheld presented itself. A SHENSTONIAN CASCADE, in full flow and fury; foaming and bellowing, as if the mountain were enraged: pouring down a river of water, white as snow, and apparently so copious, as to render our situation alarming; lest the house and its contents should be hurried away with the torrent. Had this scene broken upon the eye, abruptly and unawares, our sensations might have been excited as strongly as they were, on the first sight of the rocks of Persfield.

THIS house should contain something which would amuse every one, until the waters were laid on. The pool should be better covered from the

walk, in approaching it, and the lower part of the window be darkened, so that no water might be apprehended. If the opposite end of the room were first opened, to let in a view of the meadows, and tame country on that hand, it would not only help to amuse, but the contrast would assist in rendering the cascade scene the more striking.

THE splendour of the water is greatly heightened by the laurels and darker evergreens, which stretch out their branches from the rugged banks of the furrow, or shallow dingle, down which the water is precipitated: the foam, and the spray which flies from it, here mixing with the foliage of the evergreens, and there spreading over stoney surfaces; the steepness, the height, and the happy exposure of this fall—with the well judged distance at which it is placed from the eye—unite in rendering it one of the most sublime productions the hand of *Art* has effected in rural Scenery.

ORIGINALLY, a chapel shewed itself at the top of this cascade, as the rotundo now does over that of Hagley. Fortunately, however, it is, at present, hid in wood; so that nothing but water, wood, and apparent rock, now enter into the composition of this fascinating scene. We could have looked on it long, with rapture, had not reflection brought to our mind, that the reservoir was emptying!

This mischievous idea broke in upon our transports, and had nearly turned the whole into ridicule; until mounting the steep, examining the channel, and perceiving that, in some places, the water rolled over the dear native rock, a gleam of admiration returned.

THIS wonderful piece of machinery (for such it may well be styled) receives its rapid movements from one small fountain; which also supplies a cold bath, reclusely situated above the reservoir, which stores up its treasures, for the liberal purpose of bestowing them with greater profusion on the stranger who may ask so fair a boon.

CROSSING the head of the dingle, above the cold bath from whence the miracle-working water issues, the viewer is judiciously led to the edge of the wood, where some lovely views break abruptly upon him; composed of the Clent, Hagley, and Wichbury hills;—with the finely broken country about Stourbridge—uniting with the grounds of HIMLEY,—the residence of LORD VISCOUNT DUDLEY.

RE-ENTERING the shade, we climbed a steep path, through an extensive tract of coppice, until we reached the upper sheep walk; a wide expanse of naked turf; saving some tufts of hollies

and a few scattered trees; containing some hundred acres, sufficiently extensive to maintain several hundred sheep.

TOWARDS the center of this fine down, stands a white building,—the shepherd's lodge; in which the shepherd and his family reside. The principal part of it, however, is fitted up as a lounging room and observatory, for which it is singularly adapted. In elevation and exposure, it resembles Bardon hill, in Leicestershire; which hill, it seems, is discernible from this place: from whence, and from different parts of the down, may be seen, on the other hand, the Wrekin and the Welsh mountains, with the Malvern hills, and the hills of Gloucestershire, &c.

THIS building, however, does not appear with full advantage. It is too large, and too conspicuous, for a shepherd's hut; and too low and ill placed, as an observatory. A round tower, on a more elevated part of the down, would command no inconsiderable portion of the surface of this kingdom; and could not fail of being instructive as well as entertaining, to those who make geographical observation a part of their study, and one of their objects in travelling.

IT would be equally reasonable, in the admirers of recluse landscape, to cavil at the practical

botanist, for being gratified and instructed by the distinguishing characters of a plant, as to censure the practical geographer,—one, whose favorite pursuit is to trace the greater outlines of the face of nature,—for being entertained and informed, on viewing the distinguishing features of his native country.

LEAVING the upper sheep walk, we broke through a fresh part of the wood, into the further valley; a lovely well soiled glade; the fatting sheep walk; which assimilates, in this point of view, with the grounds of HIMLEY; these sister places happily playing off their charms to each other.

BELOW this, in a recluse part of the coppice, is a small sequestered lawn, with a cottage and an aviary (apparently ill placed) with wild peafowls in the woods. And, below this the lower sheep walk, a plain incircled with wood.

WE now climbed the further side of the valley, to the upper shrubery; where we were more than recompensed, by some stately Pines,—towering to the skies, and feathered to the grass; and, from hence a kept walk and a border of shrubs led us down to the lower shrubery: delightful spot! The Pines, here, are not only clothed to the grass, but

spread their mantles on the ground; and two sister Limes are in full dress negligées, with trains flowing some yards from their conical outlines*: with a profusion of beautiful shrubs, rising out of the softest turf we ever saw: we had not conceived that grass and trees, alone, were capable of producing so much richness and elegance. At the lower end of this shrubery, the house is situated.

WHAT a charming residence! No wonder Lord S. should spend so large a portion of his time at Enville. But he gratifies not himself alone. His Lordship's liberality is equal to his taste. His gratifications are heightened by those, even of the merest stangers, who seek enjoyment in his place: giving orders that nothing may be omitted, which can afford them gratification.

FROM what we could gather, on the spot, ENVILLE was originally designed by MR. SHENSTONE. The cascade and the chapel are spoken of, with confidence, as his; but much has been done by others. MR. GREY, LORD STAMFORD's brother, has, of late years, done a great deal, and with good effect.

* This striking appearance, perhaps, has been produced by the lower boughs that rest upon the ground, having received from it additional nourishment.

BUT the high state of preservation, in which it is at present seen, and which sets off the design to great advantage, is probably due to the attentions of LORD STAMFORD, himself; and to the assiduities of his present gardener; a man in years, and, we understand, of high reputation in his profession; and who has probably executed much of what now appears with such admirable effect.

IN returning from Enville, we made our way by HIMLEY, a place laid out on a very extensive scale, by BROWN; but we had only just time enough to see so much of it, as to determine us to take some other opportunity of examining it with due attention.

IT is somewhat remarkable, that, within the compass of a few miles, there should concenter four places of so much celebrity as Himley, Enville, Hagley, and the Leasowes.

GENERAL OBSERVATIONS.

WHAT practical ideas have we collected in this little tour?

AT THE LEASOWES we have learnt, that a few common paths, judiciously conducted, and a few

ordinary benches, judiciously placed, go a great way towards EMBELLISHING A FARM. Removing the more striking deformities, disclosing hidden beauties, whether in the site or the offscape, and shewing them to the best advantage, in suitable walks, and resting places, will generally make up the sum of required embellishments; especially in a place where much fortuitous wood abounds.

THERE, too, we saw the delightful effect of a simple path, leading through a RECLUSE DINGLE; and the absurdity of attempting a CASCADE in a tame situation; and, generally, that the NATURE OF THE PLACE is sacred.

AT HAGLEY we have seen the charming effect of a rich grassy GLADE, deeply indented by the margin of a hanging wood; and that a SHEEP WALK, broken by masses, and diversified by detached groups, is a suitable first distance to such a view.

WE have also seen, in the same view, that an OBELISK may be so formed, and so situated, as to be sufferable in Rural Ornament. We are of opinion, however, that the scene in which it appears should, in some degree, be polished, and that the sky, alone, should be its background.

The idea of simple nature, in a state of neglect, must ever be done away, before polished architecture can appear with good effect. And we are of opinion, that the obelisk at Hagley pleases, in standing forth boldly, yet modestly, and declaring, that the scene in which it appears, is not merely fortuitous, but is confessedly a work of taste.

BUT the TEMPLE OF THESEUS, thrusting its proud portico into a russet sheep walk, and from out of a thicket of mean looking firs, on the contrary, displeases: not only as being out of place; but as holding out an ostentatious display of art in a place where art was little wanted, and where it has beeen little used. Had this temple shewn its sumptuous columns, in the face of the shrubery, which forms one confine of the beautiful glade, the foreground of this interesting view,—in a part where taste has done much, and where it ought to do its best, as being immediately under the windows of the house,—it would have appeared in place and character. What a charming effect a tasteful portico would produce, in the shrubery of ENVILLE! if Lord S.'s intentions are to pull down the present building, for the purpose of erecting such a suitable accompaniment to his Spruces and Limes, we could forgive him.

IT strikes us, forcibly, that all buildings should be in unison with the immediate site, in which they are seen: a principle, however, which does not appear to have been anywhere carried into practice; nor have we met with it, in theory: this TEMPLE OF THESEUS is praised by various writers.

AT ENVILLE, we have seen the grand effect of an ARTIFICIAL CASCADE, where the site is favorable, and where nature has furnished the groundwork. Much, however, of the fascinating power of these splendid deceptions, may arise from their novelty, and were they common, they might no longer continue to please. But we are of opinion, that twenty such as that of ENVILLE, scattered over the face of *this* kingdom, where natural falls are rare, would not pall the eye, nor *really* offend the feelings, even of men of the finest taste; while, to men in general, they would be sources of high delight.

AT ENVILLE, too, we have seen, that, by means of coppice wood and sheep walk, a hilly broken country may be rendered highly ornamental, without excessive cost. The coppices and sheep walks of ENVILLE are said to pay as much, now, as they did, when let off to farm tenants.

WILD PEAFOWLS are a beautiful accompaniment, in extensive grounds.

BUT A COTTAGE, buried in extensive woods, is out of place. Cottagers are social beings. A hermit's cell, especially if it were occupied, would be more in character.

AN AVIARY OF FOREIGN BIRDS, appears to be equally ill placed, in such a situation: exotic birds are apt accompaniments to exotic plants; and a shrubery, rather than a sequestered dell, seems to be the most natural situation for an aviary.

IN the POLISHED GROUNDS of ENVILLE, we have seen what elegance and beauty may be produced, by trees and shrubs, judiciously disposed, in grounds gracefully outlined, and on lawn highly kept.

UPON the whole, it is evident, from a view of these three places, that a SITE, naturally bold and picturable, may be rendered ornamental, at a small expence, comparatively with that which is requisite to the embellishment of a place, whose ground is tame, and whose features are inexpressive. How little has been done at ENVILLE! how much at FISHERWICK! and how much more at STOWE! BROWN's talent seems to have been peculiarly

adapted to the embellishment of tame sites; giving a degree of character and expression to still life. SHENSTONE's forte, on the contrary, lay in setting off the stronger features of Nature, to advantage. It is possible, however, that education, rather than natural genius, led them into these separate walks. Be this as it may, BROWN's has been the most laborious, and, upon the whole, the most useful, part. A country, abounding with natural advantages, wants little assistance of art. But, where a large estate, and a principal residence, lie in a situation unfavored by Nature, or disfigured by fortuitous circumstances, an art which can create beauties, and hide or do away deformities, becomes highly valuable.

DIVISION THE FIFTH.

MINUTES

IN

PRACTICE.

TO the foregoing remarks on places, that have been improved by different Artists, we add some observations and reflections that have arisen out of our own experience, in places of different natural characters.

THESE places we were led to, in pursuing a PLAN FOR PROMOTING AGRICULTURE; which was first brought forward, about fifteen years ago, and which has since been extended to the MANAGEMENT of WOODLANDS, and of LANDED PROPERTY in general: thus uniting, in the same design, the several branches of RURAL ECONOMY.

THE execution of this plan has been the leading object we have kept in view, since the time it was

first proposed; and we have, at length, the satisfaction to find, that the most difficult part of our labor is past. The SURVEY of the ESTABLISHED PRACTICES of ENGLAND has been made. Those of the *Eastern*, the *Northern*, the *Western*, and the *Central* parts of it, are before the Publick. That of the *more Western* counties is now nearly ready for the Press, and the materials relating to that of the *Southern* counties, are collected, and will be prepared for publication, with all convenient dispatch.*

SECTION THE FIRST.

MINUTES IN THE MIDLAND COUNTIES.

THE first of these places, in point of time, which engaged sufficient attention to give rise to written remarks, on RURAL ORNAMENT, was a small place in the MIDLAND COUNTIES †.

* 1803. These works have since been published.

† See the Advertisement to the second Volume of the RURAL ECONOMY of the MIDLAND COUNTIES; also the Subject PLANTING, in the first Volume of that work.

DESCRIPTION OF THE SITE.

THIS small place is situated in a rich cultivated country, whose surface is sufficiently billowy to admit of beauty; with an offscape, though not striking, sufficiently interesting to accord with the gentleness of the site. The country is in a state of inclosure, and much of it in high cultivation; with a few woods scattered thinly over it: a species of country, which is very common, in the richer districts of *this* kingdom.

SUCH MINUTES, made at this place, as relate more particularly to USEFUL PLANTATIONS, and the MANAGEMENT OF WOODLANDS, appear in the RURAL ECONOMY of the MIDLAND COUNTIES, published in 1790; such as relate to RURAL ORNAMENT, and are conceived to be sufficiently interesting to bear the public eye, are inserted here.

MINUTE THE FIRST.

1785. NOVEMBER 3. In studying the nature of this place, with respect to RURAL ORNAMENT, some general ideas of practice have arisen.

THE MIDDLE GROUNDS and DISTANCES are the first subject of study. The beauties and deformities,—the pleasing and unpleasing objects,—which the more distant parts of the site and the surrounding country exhibit, or are capable of exhibiting, to the house, or other PRINCIPAL PLACE OF VIEW,—are the DATA. As in this case, for instance, ———, ———, ———, ———, &c. &c. are the objects on the middle grounds, and in the distances, which require to be exposed to view; ———, ———, ———, &c. those which ought to be screened. These are the UNALTERABLE DATA in the MIDDLE GROUNDS and DISTANCES.

BUT there may likewise be UNALTERABLE DATA within the NEARER GROUNDS, or more immediate environs of the house; such as buildings which cannot with prudence be removed; or objects more desirable than those which they hide, and which, of course, should be reserved for INFERIOR POINTS OF VIEW.

BEFORE any step can be undertaken, with prudence, the several data, whether in the distances, or on the near grounds, should be accurately ascertained, and their relative situations, with respect to each other, be faithfully delineated; especially if the near grounds be much wooded. For the same screen may cover a defect, as well as a desirable

object; a fact which it may be too late to have ascertained, when the screen is removed. A map of the place to be improved, with every knoll, water, and building, and with every mass, group, and single tree, accurately marked upon it, is essential to common prudence. If, from some elevated situation, the more distant objects can be seen, and lines be drawn upon the map, there spread out horizontally, to the several surrounding data, a degree of certainty will be obtained.

THE desired distances being let in, their respective near-grounds require to be moulded to them, as far as the given materials will allow, so as to throw them, when circumstances will permit, into PICTURABLE COMPOSITIONS; or at least, into PLEASING VIEWS. Where offensive parts are to be hid, by fresh planting, much may be done, at the same time, towards uniting the near grounds with the distances, so as to harmonize the compositions.

IF the near grounds are naked of wood, and the views, in consequence, too broad,—masses of planting thrown in, so as to divide them into separate compositions,—each a PICTURABLE EYEFUL,—such as the eye can compass and repose upon with satisfaction,—may be productive of great improvement, at a small expence.

A BREAK of this kind, rising at the angle of a house, aptly divides the views from the separate fronts. If at the same time, it can be made to hide a deformity, and lay open two well featured distances, especially if they happen to be "of various view", its operation will, of course, be still more fortunate.

IF the angle of a house, requiring such a break, happen to be the angle of approach, the planting should be formed at such a distance, as to admit of the road to pass between it and the house; and to be contrived in such a manner, as to screen the buildings, until they break upon the eye, at once; thus effecting a two, three, or fourfold purpose. If, on the contrary, the angle of the building is not immediately approached, but is sheathed in the kept grounds, the planting may be brought within a few paces of it; so as to bring the gayer tribes of shrubs, within a near view from the windows.

A BREAK of this intention should ever accord, in disposition and character, with the distance, the accompaniments of the near-ground, and with the character, and finishings, of the room from which it is seen*; and, of course, ought to have side fronts as different as the views which they assist

* See the Section, PRINCIPAL RESIDENCE, page 285.

in forming. For, as far as general principles are admissible in works of taste, the embellishments of the immediate environs should be rendered subservient to the house, the more distant parts of the site, and the surrounding country; so as to blend them, inasmuch as they are capable of being blended, into one harmonious whole. And the immediate environs, being most under command, are the best instrument of union.

MINUTE THE SECOND.

NOVEMBER 5. In designing a screen for ——, it is a moot point, whether the plantation should be formed against the fence, or be placed at some distance from it. In the first case, the expence of fencing will be lessened, and the encumbrance to the ground will be less. But being thus fixed to the hedge, it will appear the same lifeless object from every point; whereas, in the latter, it will give variety, at each step across the view: and this holds good, in general. DETACHED MASSES OF WOOD, as well as GROUPS and SINGLE TREES, give a kind of animation to a scene: and this may be the reason why BROWN was so lavish of them. But a *croud* of clumps, as a profusion of single trees, must ever disfigure the scene they appear in.

MINUTE THE THIRD.

NOVEMBER 6. The foot of the swell in——, is an obvious site for a BEND OF WATER. The skirts of the hill are naturally formed to give the water the appearance of winding, with ease, down the valley, towards another site, equally apt for another curve below; which two curves, as seen from the house, would have the effect of a natural river, especially if they were judiciously backed with wood.

THIS appears to be the principle on which artificial rivers should be formed: not to expose lengthened canals; but to shew proper bends, at suitable distances, and in situations where such *turns* might naturally be expected: after the manner in which we ever see a natural river with the best effect. Such as the winding estuary of the Severn exhibits, as seen from May Hill.

RIVER BENDS, in a rich view, are as diamonds in a rich dress. But artificial river bends, sheathed in wood, are deceptions. They are so; the fraud, however, is of a venial nature. They are not so much intended to impose upon the viewer the idea of a natural river, as to give artificial waters their

full advantage; which cannot, in a rich cultivated site, be done in any other way, than in the character of a river.

THERE are numberless situations in this island, similar to that under view; namely, a dip or shallow valley, with a rill falling down it; and the means of turning them to advantage are obvious, and not expensive; as large extents of water are not required.

MINUTE THE FOURTH.

NOVEMBER 13. The RURAL ARTIST sees trees in a different light to the BOTANIST. The shape of the leaves, the number of petals, and the parts of fructification, are to the artist, considered merely as such, matters of small importance; while, to the mere botanist, they are every thing worthy of his notice. On the contrary, the colour of their leaves in summer and autumn, and of their bark in winter; their times of foliation and disleafing; their manners of shooting, the structure and density of their heads, the outlines they usually take, and the heights to which they aspire, circumstances little attended to by the botanist, are the properties most worthy of the attention of the artist.

MINUTE THE FIFTH.

NOVEMBER 18. A SCREEN PLANTATION, open on both sides, ought not to be less than two rods (eleven yards) wide. Timber trees should not be planted at less distance than half a rod, from the young hedge plants. Flowering shrubs, however, may be planted between them; to give beauty and fullness to the screen, in the first years of its growth.

MINUTE THE SIXTH.

NOVEMBER 18. The effect of a plantation, distant from the point of view, cannot be accurately judged of, before the ground be broken, or some other obvious distinction of colour take place.

IN lining out the projection and recess,—the *promontory* and *bay*,—of plantation E. the outline determined upon appeared, on the spot, to be perfectly satisfactory: but now that the ground is dug, the planting begun, and the lines rendered distinct from the house, the point of the promontory is evidently too sharp.

In a more distant, more extensive, and more fortuitous scene, where the picturesque rather than the beautiful is required, a sharpness and even raggedness of promontory may be in character; but, where art is obvious, gracefulness of outline is required.

In lining out plantations at some distance from the point of view, as four or five hundred yards, a conspicuous mark is requisite, and nothing is preferable, perhaps, to white or light coloured hurdles; which are conspicuous and readily moved.

MINUTE THE SEVENTH.

1786, JANUARY 25. In LINING OUT NEAR-GROUNDS, the first step is to note the data;—to mark the GIVEN POINTS. In joining these points, place the intermediate marks at equal distances; or the eye will be deceived. If the line be long, trace it repeatedly with the eye, from each extremity; and having, by these repeated tracings, rendered it familiar; and having as repeatedly trod it out, in contrary directions; let an assistant follow with even strides, while a third person place marks at every second, third, or fourth step, according to the length and flexure of the line.

ON broken ground, or while snow lies on grass-land, the footsteps of the designer are sufficiently obvious, as a guide to the marker; but on green turf, it is requisite to fix them, in the instant, by permanent marks.

THE line being thus made conspicuous, it requires to be examined, from every point of view, and every walk and pathway, which commands it; and if it consist of more than one path or division, occasioned by different given points, each part should be made to play into the other, so as to render it agreeable to the eye, from whatever point it may be seen.

IN highly polished grounds, immediately under the windows of an elegant room, the smallest deviation from the line of beauty offends the eye*.

MINUTE THE EIGHTH.

JANUARY 26. In forming mixt ORNAMENTAL PLANTATIONS, some plan of proceeding is requi-

* For further remarks on this topic, see—"A REVIEW OF THE LANDSCAPE, a didactic poem; also of AN ESSAY ON THE PICTURESQUE; together with PRACTICAL REMARKS ON RURAL ORNAMENT,"—page 221.

site to be laid, respecting the plants, previously to the commencement of the operation.

THE species of plants being determined upon, and the requisite number ascertained, it is proper to list them, agreeably to their respective heights of growth, in this climate*; in order that the tallest growers may be placed in the rear ranks, the lower towards the front.

TO assist in the due ARRANGEMENT, whether as to *height* or *colour*, collecting twigs or small boughs from the several plants (that is, as many slips as there are plants of each species), and disposing them agreeably to the intentions of the artist, previously to any of the plants being put in, will be found beneficial; as saving much superintendance and labour, and preventing the plants themselves from injury, in being dragged about, from place to place, before their proper situations are found.

MINUTE THE NINTH.

JANUARY 29. In DESIGNING, whether in composition or in detail, anxiety and excessive poring

* For which purpose a list of trees and shrubs, arranged agreeably to their growths, in this country, will appear in the second Volume.

over the same subject, serve only to vex and fatigue the imagination; rendering that irksome, which ought ever to be pleasurable. It will generally be found, perhaps, that sauntering over the field of improvement, and bending the mind to such subjects as rise spontaneously, will be more productive of practical ideas, adapted to the nature of the given place, than any preconcerted plan of study. Even in the detail, returning repeatedly to the dubious point, with the mind unbent, will frequently unravel the knot, and clear up the doubt, sooner, than intense unremitted application.

MINUTE THE TENTH.

JANUARY 31. It not unfrequently happens, that a pleasing object, and one which is unsightly, appear in the same line of view from a principal point.

IF the desirable object appear in the offscape, and much above the eyesore, the evil is to be remedied, by hiding the offensive part with shrubs, of a natural growth, sufficiently high, to operate as a skreen to the deformity; yet so low, when at their fullest height, as not to hide the distant object.

SHOULD the disagreeable object be in the off-scape, and the desirable one upon the nearer ground, tall-stemmed trees would hide the one, without shutting out the other, entirely from the view.

MINUTE THE ELEVENTH.

FEBRUARY 2. In forming A SIDE SKREEN, where a line of tall-grown trees are the given back ground, or rear rank, some cautions are required.

IT is particularly requisite, in this case, to list the moveable plants that can be commanded for the purpose; not only according to their natural growths, but their actual heights, at the time of planting; for, if some show of proportion is not preserved, so as to bring down a slope from the tops of the growing trees to the gravel or turf which shall embrace the foot of the skreen, sufficiently regular not to offend the eye, the design must be marred in the first stage of execution. For with all the precautions which art can furnish, a plantation of this description must remain unsightly, for a few years after it is formed. The transplanted trees require to be thinned and

lightened of their boughs, so as to proportion them to the length and number of transplanted roots, or their success will be uncertain. And, with every precaution, their progress, for a few years, until they have established themselves in their new situation, must necessarily be slow. Hence, at the time of planting, their tops, as seen from the principal place of view, should not only appear thin and unfurnished, but should rise above the general line of ascent; in order to allow for the superior upward progress of the established plants, during what may be termed the naturalization of the strangers.

To guard against the incursions of the established trees, as well as to check their upward growth, their roots, on the side next the planting, should be cut off at a suitable distance from their stems, at the time of double digging the ground to receive the fresh plants: and moreover should, from time to time afterward, be prevented from injuring their weaker neighbours, by over-running the pasturage of their yet feeble roots; which ought, for some years, to be defended, likewise, from weeds and other enemies.

MINUTE THE TWELFTH.

FEBRUARY 2. In TRANSPLANTING young trees, of eighteen or twenty feet in height, it is imprudent to attempt to take up more mold with their roots, than will with certainty adhere to them, until they are fixed in their new situation. For that which falls off in carriage, seldom fails of carrying with it some of the finer more valuable fibres; especially if the soil be in any degree tenacious. Long roots, well furnished with fibres, and duly bedded in fertile mold, are better pledges of success than heavy balls of stale earth; which, by rendering the plants cumbrous, and difficult to be moved, too frequently causes them to be bruised and maimed, in the operations of removal.

The superfluous mold should be disengaged (with the hands or a fork with round tines), before the plant be attempted to be lifted out of its place of growth: and, from this time, until it be placed in its new situation, the roots ought not to be touched with the hands.

PLANTS of this size are best removed, by means of a lever or long pole, guarded in the middle with

ropes of hay or straw, to preserve the bark of the stem from injury. This guarded part of the pole being placed against the foot of the stem, the plant is pulled down upon it: two men bear up the root with the pole, while a third steadies the top, and keeps the plant horizontal, until it arrive at its place of destination; where, suffering the top to rise, it willingly regains its erect posture.

IN a dry season, it is essential to common prudence, TO WATER THE PITS BEFORE THE PLANTS BE SET IN THEM; first returning so much of the best of the soil as may be judged necessary to set the plants upon. If on examining the bottom of a given plant, when it arrives at the pit in which it is intended to be planted, too much or too little mold has been returned, or if the surface of the mold is not answerable to the form of the under side of the root, a person, attending for the purpose, should make the necessary regulation, while the plant remains suspended on the arms of the bearers; for it is ever mischievous to a plant, to place and replace it, in the operation of transplanting; and such unworkmanlike conduct is ever disgraceful to a planter.

THE precautions necessary to be had in planting, are, to unite the fresh mold with the soil which has been removed with the roots, so as to form them

into one uniform mass, without any pores, vacancies, or interspaces, between them; and, in effecting this, to bed the roots, and particularly the smaller fibres, evenly among pulverized fertile soil; leading them out, horizontally, or somewhat dipping from the part of the nucleus or bulb of the root, from which they naturally issue; being mindful not to raise the mold too high before they are laid down, nor to force them down, before the mold is high enough to receive them; spreading them out wide, like fronds of fern, and tire above tire; endeavouring to distribute them equally among the mold; in order to give them equal spaces, or range of pasturage; but, in endeavouring to do this, not to cramp them, or wrest them forcibly from their natural direction. If a root be longer than the rest, and too long for the width of the pit, a notch should be cut in the side of it, to give room for the root to lie easy, and at its full length, not more to assist in giving stability and firmness to the plant, than to enlarge the field of pasturage of its roots in the first instance;—in the hour of need.

The lower tire of fibres being bedded, in this manner, and covered over fully with mold (the thickness of covering being regulated by the situation of the next tire of roots) they should be pressed down firmly; first with the hands, and afterwards with the feet, to prevent any hollowness

or false filling, and, in consequence, a settling of the mold; which would cramp the upper tires of the roots therein to be laid; and, at the same time, to give the greatest firmness to the plants, at a time when much may depend on the undisturbed state of the fibres.

A well rooted plant, put in with due precautions; such as packing in the fresh mold, by hand, while the plant is in a somewhat heeling posture, so as to give freedom to the workman, and additional firmness to the filling; bedding the rootlets singly, firmly, and divaricated, among the soil (fine mold being scattered over the hands of the planter, while he keeps each branch in its proper place); treading layer after layer, as the pit is filled in; and, finally, loading the roots with soil; —receives an immediate firmness and stability, which, in sheltered situations, precludes the necessity of supporters, even to plants of fifteen to twenty feet high: indeed, well rooted plants, thus put in, seem to stand firmer—stiffer—after planting, than before they were taken up.

WITH respect to the *pruning of the tops*, part of it should be done previously to the removal; the finishing part being done after planting. Lightening the heads before transplanting (and especially shortening the lower boughs of the Pine tribe),

renders the plants better to handle, and secures them from ordinary winds, presently after removal. But there is a twofold reason for completing the operation after the plants are set in their new situation. The additional top, probably, encreases the acting power of the fibrils, to feed in their new pasture; and, when the several plants are in their places, the desirable form of the top of each, so as to make it assimilate with its neighbours, and give the best surface with a fresh plantation of this kind is capable of admitting, may be best seen.

It may be said, in general terms, that the top of a plant should not be touched with the pruning knife, while it is out of the ground; saving such part of it as is out of the reach of the pruner, when standing. The principal part of the pruning, whether of trees or shrubs, should be done before the plants are taken up; the finishing given after they are replanted, and have begun to work in their new situation. But the leaders of tall plants should be particularly attended to, while they are in a horizontal position.

The expence of transplanting is considerable. Three men moving plants, near twenty feet high, and as thick as the leg, in the above-described deliberate manner, and carrying them a hundred yards, do not move more than six or eight plants

a day. This (with the previous expence of digging the holes), is not less than eightpence or ninepence a plant. It is true, by hurrying over the work, in a slovenly way, something might be saved. But the saving, compared with the risk of losing plants of this size, the loss of labour, and the disfigurement of a plantation of this kind, is no object of consideration.

FOR further Remarks on this Method of Planting, see the RURAL ECONOMY OF THE MIDLAND COUNTIES, Minutes 146 and 168.

MINUTE THE THIRTEENTH.

FEBRUARY 6. On TRANSPLANTING the PINE and FIR TRIBES, into *plantations*, or extended masses of wood, the points or leading shoots of their lower boughs should be taken off. *First*, to check these boughs, and thereby enable the roots to send up a better supply of nourishment to the leaders and upper boughs in general. For this purpose, if the lower boughs be numerous, they may be shortened, even to the innermost wings or a pair of branches, with advantage: the Spruce Firs of plantation A. succeeded perfectly, the last season,

under this treatment*. *Secondly*, to prevent their encumbering their neighbours; the treatment being singularly applicable to the Scotch Pine, in mixed plantations. In almost every place, the evil consequences of not attending to this are obvious. And *Lastly*, in the interior of a plantation, the sooner the lower boughs die and drop off, the more valuable the timber becomes.

BUT of the Pine tribe, set out as *standards*, or in *groups*, or in the *outer ranks* of a plantation, the lower boughs are their best ornament. How rich is their effect at BERKLEY, at ENVILLE, and at FISHERWICK. But, even in this case, it is not always necessary, or proper, to suffer *all* the lower boughs to remain at their full length. If they are numerous, they will not only carry off too much sap, and thereby weaken the head of the plant, but themselves become slender, feeble, and, take a bushy unsightly form ;—whereas, by leaving a proper number of strong boughs, in suitable directions, and checking the rest, the plant will at once be invigorated, and acquire variety of outline and strength of feature, as it grows up.

TRANSPLANTED Roots can only send up a certain supply of sap, and it is the planter's duty

* *See* RUR. ECON. of the MID. COUNT. Vol. ii. p. 351.

to see that no portion of it be spent in vain,—that every drop be applied to the most useful purpose. And, further, inasmuch as single trees require a greater quantity of boughs to be left standing, the planter, if he even hope for success, ought to be sedulously attentive to take up, and remove with them, a quantity of fibres proportioned to the necessary exhaustion; and the greatest possible length of root, to give them stability and firmness, in their new situation.

MINUTE THE FOURTEENTH.

FEBRUARY 20. (see MIN. 6.) In an attempt to COLOUR this part of the plantation,—so as by rendering the recess dark, to throw it into shadow, and by giving a degree of lustre to the projection, give variety at least, if not picturable effect,—we perceive that the art of COLOURING WITH TREES is attended with a difficulty which we were not aware of: their winter and summer colours are not only different, but, in some valuable species, opposite. Thus the *Lime*, in winter, is remarkably dark, but in summer, its leaves are of the lighter shade of green; and the *Esculus*, which is singularly dark, in summer, has now, a somewhat pallid appearance.

However, there are other species we find, which are well adapted to painting. The *Larch*, for instance, is singularly light in winter; and in summer, it wears a lively green. Again, the *Ash* is uniformly light and elegant: the *Planes* and the *Aria* are still more splendid, in both seasons. But the *Evergreens* are the most permanent; though not altogether so; as, at the time of making their shoots, they wear a lighter garb, than at other seasons. In winter, the Scotch Fir, and the Larch, are admirably adapted to colouring; and, in beguiling the dreary reign of winter, the skill of the artist is best employed. Hence, the back of the recess is already a mass of Firs, and dark deciduous trees; the projecting point to be made as splendid as Larches, Planes, and Arias can render it: meaning to assimilate and soften them off, by degrees, with the Beech, as a semi-tint or intermediate colour, to the Oak and the Esculus.

But after all, painting with living colours, and in open daylight, is not only difficult, but in a degree unprofitable; for a beam of the Sun may turn the whole into ridicule; by throwing the light into shadow, and rendering the shadow a mass of light.

In plantations distant from the eye, all colouring is improper; and in those at hand, a fortuitous

assemblage is, perhaps, on the whole, preferable to any studied arrangement.

NEVERTHELESS, in ornamental plantations, in which plants of different heights are used, regard must be had to that circumstance; and, in the more gaudy exotic shrubery, colour ought not to be wholly neglected. In winter, Evergreens mixed with the crimson branches of the American Cornus, and relieved with the splendid foliage of the silvered tribe of shrubs, have a pleasing effect.

THE ARRANGEMENT OF PLANTS, however, whether as to colour or height, is a most tormenting employment. A Painter has his pallet and brush in hand, and his colours in passive obedience to his will. He sees his picture at one view, or can run his eye over it, with a single glance, and can, in a moment, make or unmake whatever his imagination dictates, or his judgment condemns.

BUT not so the Rural Artist; his colours are too unwieldy, to be worked up with his own hands: he is, of course, liable to the misconceptions and aukwardnesses of workmen; and he cannot correct an error without injury to his work. Beside, his canvas is not set up before him, so that he can see the whole at once; nor can he sketch out his whole design, in a few hours, or perhaps a few days:

planting is a progressive business, and is liable to seasons and the weather; especially if the site be of much extent.

For small plots, ascertaining and listing the plants, and distributing boughs, in the manner already mentioned, is perhaps the most eligible. And, for larger plantations, dividing them into compartments, and proceeding in a similar way, is the most practicable method we have yet been able to hit upon. Thus, the number and species of plants for the whole plantation being ascertained; the number of each species, requisite for each separate compartment, must be found, and their boughs be distributed.

The distribution of the marks is best done, before the holes are dug, where circumstances will admit of it; as each species of plants may then have spaces assigned them, suitable to their respective natures and manners of growth; and the size of the pits, too, may be adapted to the probable length of root which each sort is known to rise with; the workman describing a circle round the marking twig, and returning it to the center of the hole, when it is formed.

By calculations of this kind, and by methods of this sort, strictly adhered to, most of the embarrass-

ments incident to forming mixed ornamental plantations, may be avoided, much labour be saved, many plants be preserved from injury, and the execution be rendered comformably to the design.

MINUTE THE FIFTEENTH.

MARCH 24. IN TRANSPLANTING large plants, the success depends, chiefly, on taking them up with a good LENGTH OF ROOT; which ought not, in ordinary cases, to be less than one fourth of the height of the plant. It may be difficult, in most cases, to take up twenty feet plants, with roots five feet long; but, where plants stand tolerably free, there is none in taking up plants of twelve feet high, with roots three feet long.

ROOTS are the natural and best stay of a plant; and a planter had better bestow ten minutes in taking up, than five in staking. It is not necessary that balls of earth, of a semidiameter equal to the length of the roots, should be moved. These may be reduced to any size. Indeed, the more experience we acquire in transplanting, the more anxious we become for roots, and the less so for balls of

earth. These, however, are desirable when they can be moved without excessive expence of carriage, and without injury to the roots.

MINUTE THE SIXTEENTH.

MARCH 30. A view may sometimes be improved, at an easy expence. A few remaining trees, of one line of an avenue, had a bad effect, from the windows of a principal room, to which they nearly pointed, but not directly, their stems being seen distinct; and, of course, produced the bad effect of a straight line of trees.

THIS defect was remedied by a single shrub —a well furnished plant—about ten feet high, which covers the stems, while the tops take the form of a group; the idea of a line being lost, in the general effect. How often may similar defects be hid in this way. Had the width of the deformity been greater, a group, or a tuft of shrubs, would have been required.

MINUTE THE SEVENTEENTH.

APRIL 1. When shrubs have been drawn up tall, and rendered naked at the bottom, by being

crouded in a nursery, or a crouded plantation, it is almost impossible to prune them, into forms which will please the eye. A low growing plant, which has been drawn up tall, and consists only of a few straggling boughs, spreading out like a fan, has been improved into a well looking shrub, by planting a low spreading sucker, in the same pit, and placing it in front, and so as to fill up the central vacancy: the two affording, in this combined form, a well furnished plant: a venial fraud, which may frequently be practised with advantage.

MINUTE THE EIGHTEENTH.

APRIL 1. In PRUNING SHRUBS, at the time of transplanting, much may be done towards the future appearance, as well as the future success of the plant. This is not to be effected by lopping off the ends of the twigs, in general, and thus giving the shrub the form of a cabbage; but by taking out the inferior branches, close to the stem or the thicker boughs; and even taking out some of these, so as to make breaks in the outline;—will often give additional feature and elegance to the plant; while, by thus reducing the top, the roots are rendered the better able to send up a supply of sustenance, to the parts which are left standing.

MINUTE THE NINETEENTH.

APRIL 2. In transplanting shrubs which throw up SUCKERS, these should be carefully laid aside, and placed in a nursery quarter, to acquire roots, and become a supply of plants, in future, at a small cost. Also, from neglected shrubs, which afford natural LAYERS, wherever the boughs touch the ground, each rooted twig should be sedulously collected.

MINUTE THE TWENTIETH.

APRIL 2. In TRANSPLANTING top-heavy Evergreens, as Virginia Cedars, Junipers, Arbor-vitæs, &c. for STANDARDS, it is prudent to PLANT A SUPPORT with each of them. Not an ordinary stake, but a larger and more clubbed truncheon; placing the large end downward in the bottom of the pit, a straight part rising some few feet above the surface, and nearly close to the stem of the plant; which being fastened to it, by means of soft bandages, gains a seasonable firmness, without any outward appearance of support.

MINUTE THE TWENTYFIRST.

APRIL 7. IN LINING OUT WALKS, a slight covering of snow is advantageous, in shewing the track of the designer; which may be improved, as occasion may require. Stakes, though proper in lining a plantation, as shewing at once the effect of the intended fence, or of the marginal shrubs, may tend to deceive the eye, in the effect of a walk; whereas a track, whether in snow, or on the surface of broken ground, or given by a sharp instrument, drawn by a second person, so as to ripple the surface of green turf, is in effect the walk; differing only in width, from the walk itself, when finished.

IN wild or fortuitous scenery, the first devious track will generally have the best effect. But, in highly embellished grounds, it requires to be lined out, with scrupulous attention to the beauty and gracefulness, which ought to mark every line, in polished scenery.

WHEN a walk winds across a lawn, broken by tufts and relieves of shrubs, it should appear as if attracted by the various beauties of the scene: it

should make boldly towards them, hang to their margins, and seem to leave them with reluctance.

In tracing paths, through plantations of tall growing trees, intended to rise into groves, the trees themselves should seem to direct the path, which of course ought not to be determined on before the trees are planted. In plantations formed of tall transplanted trees, such paths may be formed immediately after the trees are put in; otherwise, they should be deferred until the trees are grown up, and the obstructing plants be removed in the thinnings: the direction of the path being *determined* (but not formally *marked*), by evergreen underwood, as Holly, Privet, Box, or cuttings of Laurel, at the time of planting. Narrow pathways, no matter how intricate, may wind in among the young plants, for the purpose of rendering the plantation itself commodious, in viewing, thinning, or pruning the plants. A path three feet wide is sufficient for this purpose.

Narrow paths of this kind render a plantation commodious, and are formed at a trifling expence. The middle of the path is the natural surface of the ground, a sloping channel being struck with a spade on either side: this, and pruning off the boughs which shoot towards the path, affords the required accommodation.

MINUTE THE TWENTYSECOND.

APRIL 10. FENCES IN ORNAMENTED SCENERY. For the security of highly kept grounds, the FOSS, accompanied with masses and tufts of wood, is the most eligible; as giving the eye the least restraint, and as serving best to assimilate the immediate environs of the house, with the contiguous park or pasture grounds*.

BUT, in the lower styles of ornament, a less expensive boundary is preferable: and for the fence of a plantation, not included within the limits of the kept grounds, but still within distinct view from the house and its environs, a simple guard, sufficient against pasturing animals, without being offensive to the eye, is the only requisite.

THAT which, after much consideration, we adopted and executed, here, is a sloping ditch and reclining bank, with a dwarf rail fence, *hanging* in the face of it, at such a distance as to prevent cattle from climbing over it, and sheep from creeping beneath it; and with a line of hedgewood on the inner side, when its use is to guard a plantation.

* See the REVIEW of the LANDSCAPE, &c. p. 231.

THE face of this fence may either be turned towards the plantation, or from it. In the former case, it is less visible; but in the latter, it is a firmer better fence, and incurs a less waste of land; for the slope of the foss being made easy, and sown with grass seeds, as well as the face of the bank, which also falls gently back, the pasturable surface is greater with this, than perhaps with any other fence. By adding a dwarf paling, this fence becomes effectual against hares, at a moderate expence.

As a fence against cattle and sheep, the following have been the dimensions, and manner of construction, here. Level the ground, and turn a gauge turf; dressing it with an even firm angle, as a guide to the whole work. Behind this turf, lay in morticed posts, four feet and a half to five feet long, placing the lower end of the mortice about eighteen inches from the angle of the gauge turf, and in such a position, as to form with the face of the bank, when finished, the lower point of an equilateral triangle, whose upper side is horizontal. Fasten the posts, and carry up the bank, with the excavated mold of the ditch; forming the face of the bank with turf; and ramming in the soil firmly behind it, as the bank is carried up; to prevent its settling too flat: and the more effectually to prevent this, the upper part of the bank should be

built, somewhat more upright, than the foot of it; which ought, of course, to form, with a vertical line, an angle of 30°. In this manner, the face of the bank is raised to about six feet slope, allowing some inches for settling; the length of slope, when settled, being about five feet and a half; namely, three feet below the level of the ground, and two feet and a half above.

THE rails are *slipt* in; the preceding one being bound by that which succeeds it: care being had not to jar the posts, before the bank be firmly settled.

WHEN the plantation is up, or the hedge becomes a fence, the bank may be thrown down; the temporary fence having then done its duty.

NEARER the eye, and where a hedge would be unsightly, the rails and posts may be repaired, from time to time, at an expence extremely trifling, compared with that of a wall or paling.

SECTION THE SECOND.

MINUTES IN DEVONSHIRE.

THE next instance of practice, in the Rural Art, occurred in DEVONSHIRE; at BUCKLAND ABBEY; the residence of the family of DRAKE, from the time of the CIRCUMNAVIGATOR, who purchased it, until the death of the late valuable possessor, SIR FRANCIS DRAKE;—now a seat of LORD HEATHFIELD.

DESCRIPTION OF THE DISTRICT AND SITE.

THE Western District of Devonshire, in which this place is situated, abounds with picturable scenery. It forms a sort of vale between the Dartmore and Cornish mountains; but differs from ordinary vale districts, in the abruptness of its surface and the dryness of its soil; possessing, in these respects, the distinguishing characters of an upland country; broken, in a striking manner, into ridges and vallies; and, in some places, rising in detached

hillocks; thus giving infinite variety of *ground*, whose steeper hangs are mostly clothed with wood; which frequently mantles down to the margins of the rivers and estuaries, with which the district is happily intersected.

BUT the immediate site under description, though surrounded with scenery of the last mentioned cast, does not partake of it. The house, situated in a dip or shallow valley, is beset with well turned knolls, folding with each other, in a beautiful manner. The whole is well soiled, and in a state of cultivation, except the more distant swells, which are steeper than the rest, and hung with wood; over which appears a rising knoll of heath, forming a happy offscape, to the principal view from the house: altogether, a *monastic* site.

SOME sixty years since, much grove planting had been done about the house: and, during the last twenty or thirty years, the whole had been suffered to grow up in a state of neglect; so that the house might be said to stand in a valley of wood, and to be rendered, at once, unpleasant and unwholesome.

SOME alterations, however, had taken place, twelve or fifteen years ago, close about the house, within the walls of the old garden: the terraces

having been thrown down, and the ground formed and laid out, agreeably to the modern style of ornament: and in a manner which would have done the artist credit, had the house been modern; but, to the remains of the old Abbey, terraces and grass plots were the best accompaniments.

PRELIMINARY REMARKS.

WITH these data, there was only one line of procedure. The character of the foreground, as well as of the distances, was beauty; and all that art could do, with effect, was to bring the middle grounds into unison with them: to break the groves and skreens, in such manner, as to leave well formed masses of wood, with vistas and grassy glades between them; shewing, with the best effect the beautiful undulations of ground, with which the site abounds; but which were almost wholly shut out from the house.

THIS has in part been done; not more with the view of disclosing the beauties of the place, than to ventilate it, and thereby endeavour to counteract the excessive moistness of its climature: an extent of orchard ground, spreading over the valley below the house, with some fences which

disfigure one of the boldest swells, still mar the principal views; and while the present *purpose* of the place remains, it might be wrong to remove them: ornament and utility should ever go hand in hand, and be ready to accommodate and assist each other, as the existing circumstances of the place require.

ON the subject of RURAL ORNAMENT, we find very few MINUTES at this place: our attention being principally bent towards the subjects of RURAL ECONOMY; particularly towards the improvement of the noble, we had almost said magnificent FARM, which, at present, may be said to constitute the place itself*. Indeed, the ornamental improvements being chiefly confined to the dividing of continuous screens, and an alteration in the line of approach, the subjects of memorandum were few.

NEVERTHELESS, the difficulties of opening picturable † vistas, through lines of tall grown wood, are ever too great, and their impressions too strong on the mind, to pass away wholly without notice.

* Some account of this Farm appears in the RURAL ECONOMY OF THE WEST OF ENGLAND,

† PICTURABLE,—grateful to the eye, in nature, and capable of being represented, with good effect, in a picture.

MINUTE THE TWENTYTHIRD.

THE practical ideas that grew out of the experience which this place afforded, turn chiefly on the proper season for this operation; and on the extreme caution and continued study requisite to the due performance of it. Endeavouring, before the work is set about, to gain a general idea of the effect of each opening, from every point of view which will command it, is the groundwork of success. This may be done, at any season; but there are only two, in which the operation itself can be prosecuted with full advantage. This is either in autumn, while the leaves are changing their colours, or in the spring, during the progress of foliation. The latter is the most proper season: for the structure, as well as the outline, of each tree may then be distinctly seen. During some days, accordingly as the progress of vegetation is slow or rapid, scarcely any two trees, even of the same species, are exactly of the same colour: while one retains its wintry hue, another is forming coloured buds, a third is in fuller bud, a fourth bursting, a fifth in pallid leaf, a sixth of a deeper tint, &c. &c. so that, at this critical juncture, the branches of adjoining trees may, in general, be

seen distinctly, how intimately soever they may be mixed with each other: of course, the outline of either may be seen, before the other be removed.

MINUTE THE TWENTYFOURTH.

OTHER ideas, which it was thought right to memorize, relate to TUFTS OF HEDGEWOOD, left standing on cutting tall-grown Hedges; to break the meagre monotonous lines of farm fences; in which, as is common in this district, no hedgerow timber appears.

THE sapling shoots from the stools, or old roots of the *Ash* run up tall, and take better outlines than those of the *Oak*; which, on the high hedge mounds of Devonshire, generally spread too wide, and take an outline too rotund and squat: the sapling groups of the *Chesnut*, the *Wild Cherry*, and the *Mountain Sorb*, also take desirable outlines; especially when Blackthorn, or other slow-growing shrubs, happen to stand on their margins. With a little attention to the freeing of the bases of these sapling tufts, while rising, their forms would be more natural, and their effect more pleasing.

THE forms and sizes of these hedge tufts should be as various as the circumstances which give rise to them. Tufts, of every dimension, feathering to the bank; taller groups, rising with naked stems; and even single stems, if suitably furnished; may afford variety and richness to the scenery, as well as that shade and shelter, which a newly fallen hedge, hacked down from end to end, is rendered incapable of furnishing.

MINUTE THE TWENTYFIFTH.

A NARROW VISTA, if the outlines are tolerable, should be free. A single tree, be it ever so beautiful, left standing in such a vista, has a bad effect; as frittering down, and dividing, that which ought to be a whole.

NOR can the eye bear a SINGLE TREE, of an ordinary form, near a well outlined mass of wood.

THESE are truths which experience taught at this place. The views, in both cases, were improved, by removing the single trees*.

* Nevertheless, when the outline of a group, or of a large mass of wood, is ragged and unsightly, a well featured Tree, standing near its margin, may, by engaging the eye, be advantageous. *See* MIN. 31.

MINUTE THE TWENTYSIXTH.

BUT the most interesting idea, we find registered, in attempting to improve the appearance of this place, arose in freeing a grove of full grown Oaks from the foulnessess with which it was obscured, and rendered altogether unintelligible, from the principal point of view. Having freed its surface, sufficiently to give a general idea of its figure and outline, and having disclosed irregular plots of greensward on different sides of it, the desired effect was produced! though the greater part of the base, on the side toward the eye, remained foul. By the help of the plots of ground which were seen, and by the form of the canopy being obvious to the eye, the imagination readily conceived the rest, and rendered the whole intelligible.

GENERAL REMARKS.

FROM the sum of the experience gained, here, we have learnt, that the principal requisites, in developing the beauties and brushing away the deformities of a place overloaded with wood, are circumspection and application. It is true, an eye

habituated to picturable scenery, and especially one which has been accustomed to produce it, will discover beauties in the midst of deformities, more readily, than one which is inexperienced; yet in complicated cases, the keenest cannot decide at sight.

THIS may account, in some measure at least, for the "monotony and baldness," complained of in MR. BROWN's manner. Towards the latter part of his practice, Mr. B. had but little time to bestow on any one of the numerous places he was engaged in: if obvious beauties struck him at sight, in the fortuitous scenery of the place to be improved, he no doubt retained them; but he had not time *to search for beauties among deformities*; nor if he had detected them, had he an opportunity to attend to their developement: he could not be in every place, at the time of foliation or discolouring of the leaves; nor had he leisure to stand, in person, to watch the effect of the fall of each tree, and thereby determine the fate of the next: and, being thus unable to unravel the knot, he might sometimes cut it: While at STOWE, BLENHEIM, and FISHERWICK, where he had leisure to attend personally to the minutiæ, he produced a richness of scenery, which shews that he had great abilities in his profession.

SECTION THE THIRD.

MINUTES IN PERTHSHIRE.

THE last place, to which the same pursuit led was TAYMOUTH, the principal residence of the EARL OF BREADALBANE, in PERTHSHIRE.

DESCRIPTION OF THE SITE.

TAYMOUTH is situated in the center of the Southern Highlands, among the loftiest and most savage of the Grampian mountains; but in a fertile and spacious valley,—the head of STRATH TAY,—the garden of the Highlands.

THE upper part of the valley, above the grounds of Taymouth, is occupied by LOCH TAY, and its fertile banks; overlooked, on one side, by the HILL OF LAWERS, and, at the further extremity is seen, in a striking point of view, BEN-MORE; mountains which rank among the very first in the island.

THE base of the valley is about a mile in width, and the culturable lands, which hang on the lower margins of its mountain sides, about a mile more. Above these, lines of green mountain pasture succeed; but their greenness is presently lost in the heath of the mountains on mountains, which rise on either side of the valley; especially on the North.

THESE MOUNTAINS, though often steep, are seldom broken or rocky;—except the heads of the Farragan, Schehallion, and Glenlyon hills, which are in the highest style of mountain scenery. But they are hid, in a great measure, from the grounds of Taymouth, by a beautiful hillock, or minor mountain, DRUMMOND HILL, which rises steeply on every side out of the base of the valley (here dilated), and skreens them on the North.

THE RIVER TAY, which receives its name from the Lake, and is, at its efflux, a river of the third or fourth magnitude of rivers in this island, takes a winding course through the base of the valley, which has evidently been formed by water: for although its surface, at present, is uneven; lying in level stages, one higher than another, according to the period of time at which each has been formed; the highest stages being not less than thirty or forty feet above the present bed of the river; yet

each stage is of the same gravelly loam, which constitutes the soils of all the "haughs" or river-formed lands of the Highlands.

BUT the time and manner, in which the higher stages have been formed, seems difficult to be accounted for; unless it were done primevally, when the mountains and vallies themselves were formed; or, during some extraordinary convulsion, since that period. In Glenlyon, a narrower and longer valley, there are stages of land, evidently water-formed, which cannot be less than forty or fifty feet above the present bed of the Lyon*.

THE lowest stages of the lands of Taymouth rise only a few feet above the water, in the time of floods; which, being regulated by the extensive surface of the lake, do not rise to a great height.

THE HOUSE is situated on the largest of these lower levels, which is nearly encompassed by the river; the buildings standing in the center of a sub-peninsula, which, in outline, resembles the section of a bell, and which forms part of a deer park that contains some hundred acres.

* These heights, however, are merely estimated by the eye, and may not be accurate.

FORMERLY, a sumptuous garden stretched out in straight lines, from the front of the house; vying with Moor Park in symmetry and sweetness;—if one may judge from the description of the one;* and a tolerable representation, which has been preserved of the other. The lines themselves have long been erased; the park now embracing three sides of the house;—an ancient Chateau, modernized.

AT a short distance from the North front of the house, rises a stately avenue of Limes,—the tallest and finest we have seen. But the most extraordinary circumstance of this avenue (if it may be so termed), is its form or ground plot; which is that of the letter ∩; occupying the *crown* of the peninsula; the semicircular part having, it is probable, traced the banks of the river, at the time of forming: a licence this, which, a century ago, must have been audaciously heretical,

THE late EARL OF BREADALBANE, who possessed the estate, and made Taymouth his principal residence during a length of years, made great alterations in the place; and, considering the day in which they were done (near half a

* See SIR WILLIAM TEMPLE'S Account of MOOR PARK in page 216 of this Volume.

century ago, in the early dawn of rational improvements), they remain, among a variety of other improvements which took place on his extensive estates, proofs of his superior abilities.

THE cardinal improvement, which Taymouth has received from the liberal hand of its late possessor, has been effected by PLANTING; by cloathing the naked hills which overlooked his domain, with wood; particularly the STEEPS OF DRUMMOND, which rise with an ascent, almost unassailable by the human foot; yet are now mantled, from the base to near the summit with woods of the most luxuriant growth: the lower and middle regions with Oaks, Beeches, and other deciduous Woods, interspersed with Larches and Firs; the upper region with the Highland Pine.

THE Southern banks, which rise to the view from the front of the house, take a very different form: they are composed of rich well turned knolls, rising one behind the other, with dips or flattened stages between them; falling back with easy slopes; so as to form a most *beautiful* style of ground: such as is seldom seen in mountainous districts.

THE highest of these well soiled swells had retained its native covering; chiefly Birch; which

had been preserved for the use of the tenants of the estate: having been the only *timber*, which, on this part of the estate, had escaped the ravages of licentious tenantry, and contending clans. On the lower swells, much planting has been done: more, indeed, than the quality of the soil warranted; and more than picturable effect required.

But the most striking alteration which the late possessor made, at Taymouth, and which now marks it, perhaps, distinctly from every other place, was that of forming terraces along the brinks of the river banks; whether the feet of these banks are now washed by the river, or whether it has, in process of time, changed its course, and formed opposite banks; leaving meadowy grounds between them. In one part, the banks now stand some hundred yards from each other; a field of several acres occupying the space between them; lying a few feet above the river, and thirty or more below the terraces which wind on either side of it.

The mode of forming these terraces was simply that of planting lines of trees, chiefly Beeches, nearly parallel with the brink of the bank; winding as the bank winds, unless where the bends are abrupt; and there, the trees take a more easy flowing line: of course, the width of these terrace walks, or lines of space between the trees and the

bank, varies: thirty feet may, perhaps, be taken as a mean width. These walks have ever been kept in a state of turf, and mown as grass walks.

THE banks, though mostly steep and rugged, are hung with wood; which, having risen above the eye, the river, its banks, and the beauties they contained, with the opposite hangs of the valley, and the mountain distances which rise behind them, were, in course, shut out from the view. These terraces were become little more than wide grass walks, winding under the shade of tall lines of coppice wood, a mile or more in length.

THIS, however, was more strictly the case, on the North side of the river. On the side next the house, the river banks are various in height. The walk dips, in some places, down to the lower levels, a few feet above the river; from which it was separated, by a thin line of brushwood only; and, in two parts, this had been cleared away: so that, in these parts, the entire surface of the river was seen.

THESE terrace walks are separated from the farm grounds, on the North side of the river, by a half sunk wall, and a dwarf hedge;—from the park and paddocks, on the South side, by a dwarf wall, with square rough stone pillars, at equal and short

distances. On the outside of these pillars, and this dwarf wall, is fixed a slight frame of wood, as a support to five or six ropes, stretched one above another, as a fence against the deer. This fence, however, taken all together, is very unsightly, and is insufficient.

AT the terminations of these terraces, stand ornamental buildings, after the manner of Stowe; with others scattered on the Southern banks of the valley. They are, in general, in a good taste, and capable of producing as much effect as useless buildings generally are*. A sub-cylindrical tower, or observatory, raised on the highest of the Southern swells, and partially hid by the wood of Birches, is by far the most pleasing of these buildings.

THE undulating surface which has been described, partially wooded, and receiving additional expression from the tower, a fort, and a temple, placed on conspicuous parts of it, and the whole backed by mountain knolls, form an agreeable view from the front of the house. But, unfortunately, the eating room is the only principal room from which it is seen. The drawing room and the library are on the West front; from which the

* AS RETREATS, some of these buildings have their use. Indeed, grounds extensive as those of Taymouth, and in a climate uncertain as that of the Highlands, require them.

only view was a square grassplot, of a few acres, hedged in by the tall avenue on one side, and by another line of tall trees, in front ; without any object to entertain the eye, except a single tree, tolerably well featured, standing near the center of this green area.

PRELIMINARY REMARKS.

UNDER these given circumstances, the leading steps of improvements were evident. First, to break the skreen which stood immediately across the view from the West front, in such manner as to disclose to the view from the windows of the principal rooms, the best scenery which the low situation of the house, and the circumstances of the place, were capable of affording. Next, to open the terrace skreens, so as to give additional feature to the views from the house, and, at the same time, to disclose the house to the walks, in the best point of view ; as well as to display the beauties of the terraces to each other. But most of all, to sever these skreens, in such parts, as command picturable composition : and this most especially where the river, or the lake, forms a middle ground to mountain distances.

DURING a residence of near two months, in the summer of 1792, these improvements mostly occurred, and, in the spring and autumn of 1793, were in some part executed. By reaching the ground, before the foliation of the trees took place, the skreens were most pervious to the eye, and the exact situation of the breaks were, of course, the best seen; and the progress of the foliation was the most favorable time for catching the best outlines, ragged coppice wood is capable of affording.

BUT these ORNAMENTAL IMPROVEMENTS being secondary to more important objects; namely, those of ascertaining the present state of the RURAL ECONOMY of the HIGHLANDS; and of pointing out the means of their improvement, more particularly THE IMPROVEMENT OF THE ESTATE OF BREADALBANE*; few MINUTES were made on them, at the time. Nevertheless, they did not pass entirely without notice.

* Part of the information, collected in this district, has been presented to the BOARD OF AGRICULTURE, as a REPORT concerning the CENTRAL HIGHLANDS. The whole may hereafter appear, together with such MINUTES in RURAL ECONOMY, as were made at TAYMOUTH.

MINUTE THE TWENTYSEVENTH.

1793. May 17. BREAKING THE TERRACE SKREENS. The general effect is equal to expectation; but good outlines are not to be had, from the fortuitous wood of the skreens; and the abruptness and raggedness of the cleared banks offend, and prevent the river from being seen with full advantage.

HOWEVER, by shelving the outer brink, so as to bend the turf, with an easy swelling slope, from the level of the terrace, and giving suitable outlines to the side skreens,—by planting trees and shrubs of different heights, to form banks of foliage, like those which are seen in the fortuitous masses of park scenery,—the vistas will be made to accord, at once, with the middle grounds of the views, and with the terraces, as immediate foregrounds. The eye, whether it be employed in the general composition, or in the place of view from which it is seen, will be equally gratified; especially, if the more beautiful of the vegetable tribes be made to assimilate with the grassy carpet of the terrace.

MINUTE THE TWENTYEIGHTH.

MAY 19. Much is to be done by application, attentive, but not too intense. By sauntering leisurely over the site of improvement; prying into each recess, for latent beauties; and penetrating every pervious part, for more distant objects.

IN this way, it has been perceived, that the house may be rendered a good object from the North terrace, and the bank of the North terrace a beautiful feature from the house. That the distant mountain of Lawers may be disclosed to the drawing room, and that of Benmore, it is hoped, may be shewn, in a happy point of view, from the library. What a prospect for a subject to contemplate! A mountain rising, at near thirty miles distance, his own property, and situated near the midway of his estate; which reaches from his house to this mountain, and from this mountain to the Western sea,—some forty or fifty miles still farther distant! No other subject, perhaps, *can* enjoy such a view. It ought, therefore, to be disclosed, even though some of the beauties of Taymouth should be sacrificed to the disclosure*.

* On strict examination, however, it was found, that the library stands *a few feet* from the line of view. From the terrace, it is seen with advantage.

MINUTE THE TWENTYNINTH.

MAY 19. One of the possessors of this estate, fearful that the Tay should wear away the isthmus, and carry off his castle, fetched five hundred of his tenants out of Argyleshire, to assist in making a long high pier of stones, to guard it. Tradition says, that meal being scarce, a famine was brought on, by this ill planned work, before the poor fellows could finish their task. Had one half of the stones been lodged, in a flat sloping pile, against the bank of the river, at the bend, the work would have been more effectual, and have been done with one fourth of the labour; besides preserving the natural sweep of the river; instead of giving it an unnatural, and, of course, an unsightly turn; and, what is still more disagreeable, forming a noisome unwholesome swamp, between the pier and the natural banks; and this, in the immediate neighbourhood of the house. It would be worth some hundred pounds to have it undone. A hint for those who have similar works to execute.

MINUTE THE THIRTIETH.

MAY 25. It is difficult to open a LINE OF VIEW, between two objects (or between an object and a point of view), which, in the outset, cannot be seen from each other: as in bringing the church of Kenmore within the view from the drawing room. A cautious perseverance, alone, can properly effect it. The best assistance, perhaps, is to suppose a middle point, and, beginning at each end, trace a line towards this supposed point; clearing away brushwood and undergrowth. If, on reaching the midway point, the lines happen to take the same direction, the true line is found: if not, the angle, they make with each other, will show on which hand the true point lies. Or if trees only obstruct, and firm ground only intervene, begin at either object, and trace a random line, until the obstructions are permeated, and the required object can be seen: and, by this false line, endeavour to ascertain the true one.

MINUTE THE THIRTYFIRST.

JUNE 2. In breaking through deep skreens of tall grown trees, and where good outlines cannot

be had, a handsome single tree, left at a small distance from the mass, engages the eye, and adds to the general effect*.

MINUTE THE THIRTYSECOND.

JUNE 2. The narrower the vista, the larger and more distinct the object. Benmore, viewed through the contracted vista from the West-front terrace, appears with infinitely more magnificence and strength of character, than when seen from the lower terrace; where the view being wide,—the entire valley of the lake,—the mountain appears proportionally small.

THUS, also, the tower of the church, seen through the vistas of the terraces, acquires an importance, and a degree of picturable effect, which, beautiful as it is, it does not produce in broad open views.

THIS appears to be a universal law, in vision; and, perhaps, accounts for the extraordinary satisfaction which the eye receives from contracted views; and for the use of side skreens, in landscape.

* But otherwise, if the contour of the mass be pleasing, and the single tree ill formed. See page 382.

MINUTE THE THIRTYTHIRD.

JUNE 9. Every picturable composition has its proper POINT OF VIEW. If the eye recede too far from the side skreens, or lateral bounds of the view, it is cramped, and abridged; if it approach too near them, it becomes broad and staring. This is singularly evident on the principal terrace. The vistas are formed of such widths, as to shew the views, at present, with the best effect from the walk which leads along the inner margin of the terrace. Viewed from the outer margin or brink, the composition is deranged, and the raggedness of the bank offends, as being discordant with the middle grounds and first distances that are everywhere caught. It has a similar effect, though not caused by the same law of vision, as standing too near a picture.

HENCE the expediency of strewing tufts of shrubs on the outer margin of the terrace, to force the spectator to the proper distance.

OTHER uses of breaking the greensward of the terrace (in this part of considerable width), are those of giving suitable outlines to the extremities

of the skreens, and of thickening them between the vistas; the natural skreen, in this part, being thin, and permitting a partial light; which would prevent the full effect of the open views. These relieves of shrubs will, also, give an immediate richness and fullness to the foregrounds of the several compositions; which, without them, would, for some years, until the skreens are fully furnished, have remained too bald and meagre; the openings being purposely made wider than immediate effect requires. Beside, they will furnish an opportunity of evincing the genial climature of the Highlands; in which exotics, of almost every kind that bear the open air of this island, luxuriate. They will, at the same, time give immediate beauty to the place of view, in the flowering tribes; whose beauties will begin to fade, and may readily be brushed away, when the less gaudy plants have acquired sufficient richness and elegance of outline, in the luxuriance of their growth, to fill up, with due effect, the conspicuous parts of the scenery, in which they may hereafter appear.

IN DESIGNING these RELIEVES OF SHRUBS, it has been a rule, with respect to size, to keep them within the fullest limits, rather than to exceed them. The broken ground may be readily enlarged, but not easily contracted. Beside, as the *shrubs* spread forward, the *flowers* will want room on the mar-

gins; so that there ought to be an annual enlargement, until the full extent be reached; when the flowers should be discontinued: and, finally, the shrubs themselves should be removed, or those of the skreens be suffered to be overgrown, by their more robust and taller neighbours: single standards, or groups, being left in the detached tufts, or the whole cleared away,—as circumstances will not fail to point out.

MINUTE THE THIRTYFOURTH.

SEPTEMBER 1. The steep wooded face of Drummond Hill, when looked up to at a suitable distance from its foot, has a striking effect. But such a view of it does not occur on the kept walks of the terraces; nor has there ever appeared to be any means of producing such a one, without removing part of the circular avenue; until this morning; when a line of walk was struck out, which will be highly advantageous, for viewing the grandeur of this wooded steep, and which will afford an agreeable communication between the West-front terrace and the bridge, without profaning this grand remain of antient gardening; whose dampness and gloom may still be enjoyed, by those who prefer its shade to a more cheerful communication.

WHAT a length of acquaintance is required, to ascertain the best advantages of a place. The surest guard against missing them, is, perhaps, not to execute, before the eye and the judgement are fully satisfied—until all doubts have vanished.

MINUTE THE THIRTYFIFTH.

SEPTEMBER 8. To give limits to the width of the lawn of the grand terrace, and for the conveniency of the mowers, ran a wavy path along the steep face of the bank (here not less than thirty feet high), a few feet below the brink; humouring the relieves of shrubs which bend over it, as well as the natural or fortuitous varieties of the ground. Its effects from the opposite banks are good; and what was unforeseen, it will, when the brushwood below is grown up, add no mean variety to the solitary lounger. A still more russet track, at the foot of this steep rugged bank, wildly deviating on the margin of the river, would farther add to the variety.

MINUTE THE THIRTYSIXTH.

OCTOBER 31. Not being able to see the real plants put into the broken ground of the terraces, the thought of setting up FALSE PLANTS, to prove

the design, and to serve as a guide to the planter, fortunately occurred. The top wood of the trees lately fallen, afforded boughs of different heights and colours: and, in a few days, a full idea of the effect which may be expected from the living plants, some years hence, has been produced.

By means of these false plants, it was found, that some of the segments of broken ground, formed for the purpose of thickening the skreens between the vistas, were not full enough: there was not room to bring down the banks of foliage, with sufficient slope; they were too steep to please the eye, and for the growth of the lower shrubs, in front. A few feet more, in width, have given the required declivity; so as to be able to proportion the fresh plants to those already in their places, without offending the eye, or cramping the marginal shrubs.

Another material advantage gained by this expedient, is, the planter may now proceed without hazard. He may either take an exact measure, or the bough itself, as a gauge to the required plant; and thus select, with certainty, that which is suitable to the given situation.

In setting up these false plants, it was found that, in order to give them a NATURAL EFFECT, it was

requisite to lean their heads considerably outward: and the same principle holds good, in forming tufts, or banks of foliage, with LIVING PLANTS.

FARTHER IMPROVEMENTS SUGGESTED.

THE alterations, mentioned in the foregoing Minutes, are but the minor part of those which TAYMOUTH required. And it will not be altogether uninteresting to those who have seen the place, or may hereafter visit it, to notice, here, some of the many improvements, of which we conceive it to be still further susceptible.

FIRST, The disgusting park fence, which has been mentioned, is required to be removed, and a foss to be sunk, agreeably to the outline already drawn; including an enlargement of the principal terrace, as a place of view, and to receive a conservatory retreat, or morning room, *furnished* with the most fragrant and beautiful exotic plants*.

SECOND, A removal of the whole, or a principal part, of the unsightly River break, mentioned in Minute Twentynine, is wanted; in order to cover

* See REVIEW OF THE LANDSCAPE, &c. page 233.

the offensive swamp which it has formed,—with living water; thus uniting it with the present course of the Tay, in a broad River bend,—with or without an islet.

THIRD, The Lines of Terrace Trees require to be broken, in different parts; especially to let in the more distant mountain scenery to the house; and to be thinned, in other parts, before their tops are injured, by interfering with each other.

FOURTH, The lines of approach, both from the East and the West, may be altered with happy effect. The proposed lines, in the immediate view from the house, have been drawn.

FIFTH, The deer park may be enlarged with advantage,—by admitting the truly parkish passage between the present lodge and the kitchen garden*.

SIXTH, The beautiful sloping grounds, which rise in front of the house, are capable of much improvement. There are many " harsh lines and angular insertions," which require to be softened;

* The origin of this admirable idea, however cannot be claimed by the writer of these remarks.

and much picturable beauty to be disclosed: the lower margins of the hanging woods should fall down in loose festoons, at the foot of the slope; and the ragged Birch woods of the higher knolls be thrown into irregular masses, with grassy glades between them, in the forest style. Much of the soil is rich, and the turf, where it is cleared, remarkably fine. In a district where rich soils and fine turf are so sparingly scattered, it were almost criminal to suffer them to remain encumbered with rough coppice wood, now no longer wanted. Utility as well as Ornament requires the well soiled parts to be cleared from their present roughnesses, and the stoney and less reclaimable parts to be filled up closely with wood; thus converting every part to its proper use, and gaining a happy first distance to the mountain offscape, which rises behind it.

SEVENTH, Carriage roads are much wanted along the slopes, on either side of the valley; especially for the accommodation of strangers. The extreme parts of the grounds are too distant, and their access too difficult, to be assailed by the foot, especially of the delicate,

LASTLY, The house, which is not at present equal to the place, or the estate, on which it stands, requires to be enlarged. A principal front, forming a quadrangle with the present house and wings,

would not only command a fine bend of the Tay, in a striking point of view, as well as the beautiful scenery last described, but the mountain view, which has been mentioned as most desirable.

WITH these alterations, TAYMOUTH, independent of the additional charms of contrast arising from the romantic scenery and savage wildnesses in its neighbourhood, might rank among the first places of the island. In magnificence of situation, and in picturable scenery of the softer kinds, it is entitled to precedency. The sublime, the romantic, or the more savage features of picturesqueness, must not be looked for from the immediate grounds of Taymouth; though the last may sometimes be caught. As a principal summer residence of a man of fortune (the remoteness of its situation apart), there are few places equal to it. Places in general are but limited parts of the districts they lie in, or command;—are hemmed in, on one side or another, with insuperable barriers, or with nuisances that cannot be removed; whereas Taymouth is a district within itself; and every part may be ranged over at pleasure, whether for exercise merely, or to enjoy the endless variety of view, which the different parts of it are capable of disclosing.

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